ורפא ירפא

The Journal of Torah and Medicine
of the
Albert Einstein College of Medicine Synagogue
and the
Rabbi Isaac Elchanan Theological Seminary

Volume VI





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Foreword by the Dean of RIETS

We are excited to present this sixth volume of the Verapo Yerape journal, under the editorship of: Rabbi David Shabtai, MD, a graduate of Rabbi Isaac Elchanan Theological Seminary and the Bella and Harry Wexner Kollel Elyon at RI-ETS, and Rabbi Peter Kahn, a graduate of RIETS and a fellow in the Rabbi Norman Lamm Kollel L'Hora'ah (Yadin Yadin). We also want to express our appreciation to Rabbi Yair Hindin, rabbi of the Einstein synagogue and RIETS graduate for all of his work with the Einstein community.

In an age of scientific discoveries, new treatments, and seemingly miraculous innovations, the Verapo Yerape journal is a critical contribution to the world of medicine and halakhah. Baruch Hashem, our people are blesses with a Torah system to grapple with and clarify these new discoveries, and a new generation of young scholars to shed light on the fascinating questions they bring to the fore.

As the premiere institution following the philosophy of Torah u'Mada - the intense study of Torah and science - Yeshiva University is proud to play a leading role in publishing original works clarifying both the halakhic and hashkafic aspects of modern medicine. It is especially gratifying to see our students - both medical students and rabbinical students - intensely involved with this effort. It is our hope and prayer that these exceptional young men and women will continue to be mekadeish shem shamayim through their holy work for many years to come.

We are indebted to President Richard M. Joel and President Emeritus, Rabbi Dr. Norman Lamm, who have provided the leadership and encouragement necessary to bring our efforts to fruition. I also congratulate the editors and contribu-

tors of this volume, students in both RIETS and Einstein, for their top-notch scholarship and concomitant commitment to Torah values and ideals. We also recognize the constant and critical support of Dr. Edward Reichman, Editorial Advisor to the journal, Dr. Jeffrey S. Gurock of the Michael Scharf Publication Trust of the Yeshiva University Press, and, of course, Dr. Edward Burns, the Dean of the Albert Einstein School of Medicine. As always, we are grateful to Michael and Fiona Scharf for their benefaction which allows us to publish this journal of Torah and Science.

I am confident that you will enjoy the articles in this volume, both in terms of their scholarly substance and in terms of their Torah U'Madda synthesis.

Rabbi Menachem Penner (RIETS '95) Max and Marion Grill Dean, RIETS 4 Kislev 5776

Foreword by the Dean of AECOM

The inaugural issue of Verapo Yerape was published in 2009. It was a landmark publication rich in symbolism. It represented the enduring ties between Einstein and Yeshiva University, the critical influence of the Einstein Synagogue Rabbi, and, most significantly, the extraordinary talents of the bnei and bnos Torah among Einstein's amazing student body. Now, in 2015, six years later, the sixth edition of this continuing monograph is being prepared for publication in 2016. With so many references to the number "6", it's edifying and fun to explore this number in Jewish tradition.

Both the author contributors and appreciative readers of Verapo Yerape share several key character traits. They are dedicated to Toras Hashem and to Medinas Yisroel. The Torah begins with the six days of creation and alludes to Chag Hashavuos, the quintessential manifestation of Matan Torah which takes place each year on the 6th of Sivan.

As Jewish history unfolded, the 6 pointed Star of David, attributed to a design of Shlomo Hamelech, began to grace the entrances of synagogues worldwide since the sixteenth century. Its prominence became so great that by the end of the nineteenth century, the Zionist movement adopted it as its symbol, and the State of Israel made it the center of the Israeli flag. Finally, the 6 pointed star is the emblem of Magen David Adom which, since 2006, has been recognized by the International Red Cross as the official symbol of emergency medical care in Israel.

So, to my precious students, my dear colleague Rabbi Hindin and to the esteemed Jewish medical ethicist Rabbi David Shabtai, I appreciate your working on this meaningful volume with Peter Kahn, the Einstein Editor of this sixth edition of the publication I am so proud of. Having Rabbi Dr. Shabtai, a physician rabbi talmid chochom who graduated from YU's Wexner Kollel Elyon and is on the Advisory Board of Einstein's Program for Jewish Genetic Health cements the eternal bond between YU's Torah traditions and Einstein in a year where many have questioned the strength of that union. To all of you, you have once again demonstrated why the Albert Einstein College of Medicine is the premier medical school in the world representing the best of modern orthodox Judaism. May your commitment to the ideals of "six", the State of Israel, the legacy of Matan Torah and the dedication to medicine and respect for all people exemplified by the Israeli Red Cross guide you to a glorious future of Kiddush Hashem.

Edward R. Burns, M.D. Professor of Medicine and Executive Dean MTA-'69, YC-'73, Einstein-'76

RABBI JASON WEINER

Guide to Filling Out a POLST Form in Accordance with Halakhah

"POLST" ("Physician Orders for Life-Sustaining Treatment") is a physician order outlining the medically indicated plan of care for a patient who, based on best medical judgment, is nearing the end of his or her life. (In general, POLSTs are appropriate for patients with a life-expectancy of 12 months or less). The aim of a POLST is to ensure that the patient receives care consistent with both medical judgment and patient preferences. It is most typically used to prevent unwanted or ineffective treatments, reduce patient and family suffering, and ensure that a patient's wishes are honored.

A POLST differs from an Advance Directive in that Advance Directives are based solely on a patient's preferences – be it identifying the person the patient wants to make decisions when the patient cannot make his or her own, or providing a general guide as to what the patient wants in terms of medical care. A POLST, in contrast, is a physician's order that the health care team can act upon, akin to any other physician order found in a patient's medical record. A doctor or patient can reevaluate and change a POLST form at any time. In fact, it should be reevaluated as the patient's condition changes, just as any other medical order should be reassessed based on the patient's condition.

Rabbi Jason Weiner is the Senior Rabbi & Manager of the Spiritual Care Department, Cedars-Sinai Medical Center, Los Angeles; Author of "Guide to Observance of Jewish Law in a Hospital".

We will discuss three of the primary categories of medical intervention that a POLST addresses in most states, and we will present general guidance regarding approaches to them in Jewish Law.

DNR

A DNR (Do Not attempt Resuscitation) order indicates that if the patient's heart stops beating (cardiac arrest), the medical staff will not initiate CPR through chest compressions or electronic defibrillation, but will instead allow natural death to occur. Similarly, a DNR order indicates that if the patient stops breathing (respiratory arrest), the medical staff will not initiate artificial (mechanical) respiration by inserting a tube into the lungs (intubation) and then connecting that tube to a mechanical ventilator. In this case as well, natural death is allowed to occur.

Halakhah strongly emphasizes and often requires the preservation of life. The rule of thumb is that we must do everything we can to prolong life; however, it is not obligatory to initiate medical interventions that prolong suffering at the end of life. It is forbidden to do anything to hasten a patient's death, even by a moment and even if the patient is already dying, but it is not obligatory to actively administer interventions that briefly prolong a life of pain and suffering.²

Patients who adhere to Halakhah often do not accept a DNR order. However, there are circumstances in which it would be halakhically appropriate to withhold CPR and intubation in order to passively allow nature to take its course.³ There are generally three conditions under which a DNR may

¹ Nishmat Avraham, Yoreh De'ah 339:4 (7), p. 509 in 3rd edition; Lev Avraham 32:11.

² Iggerot Moshe, Hoshen Mishpat 2:73(1); Lev Avraham 32:11; Shiurei Torah Le-Rofim, vol. 3, 313.

³ Nishmat Avraham, Yoreh De'ah 339:4 (2:V), pp. 502-3 in 3rd edition; Lev Avraham 32:10; Iggerot Moshe, Yoreh De'ah 2:174, Hoshen Mishpat 2:74.

be permissible (or possibly even obligatory⁴), under the guidance of an experienced expert in Jewish Law and as long as all three criteria are met:⁵

- 1. Expert medical opinion has determined that the patient is terminally ill, there is no chance of a cure, and the patient is heading towards death (and as such, medical interventions can only minimally prolong life).
- 2. The patient is suffering very much physically or emotionally even though he is receiving medication to control the pain.⁷
- 3. The patient does not want to undergo resuscitation.8

6 Definitions of terminal vary from a few months to a year to live.

7 Lev Avraham 32:10 #6. The suffering of the family is not a factor (unless the patient is a child). Furthermore, we are concerned only with how much the patient is suffering, not their age, mental capacity, socio-economic status, etc (Encyclopedia Hilkhatit Refuit, vol. 5, 157). R. Moshe Feinstein ruled that an unresponsive patient is considered to be suffering because the soul's inability to leave the body at the end of life is considered painful even though it is unrecognizable to an observer (Iggerot Moshe, Yoreh De'ah 2:174). R. Shlomo Zalman Auerbach similarly ruled that a comatose patient is considered to be suffering and may remain DNR status (Nishmat Avraham, Yoreh De'ah 339:4(iii), p. 501 in 3rd edition). R. Elyashiv, on the other hand, ruled that an unconscious patient cannot be considered to be in pain and thus cannot be DNR (ibid. and p. 104).

8 Based on these principles, R. Moshe Feinstein ruled that if a patient's heart has stopped for an extended period of time and he can possibly be resuscitated, but he will likely be severely debilitated and thus suffer as a result, the patient should not be resuscitated unless we know that he wants to be, despite the associated pain. When we do not know the patient's wishes, we assume that most people would not want to live that way (Mesorat Moshe, 356). When possible, we must ask the patient for his opinion, explaining the value of a continued life of teshuvah and ma'asim tovim (Encyclopedia Hilkhatit Refuit, vol. 5, 155), and we must receive the opinions of multiple expert doctors that the patient is indeed dying (Iggerot Moshe, Hoshen Mishpat 2:75). If we are unable to de-

⁴ Iggerot Moshe, Yoreh De'ah 2:174(3); Akiva Tatz, Dangerous Disease and Dangerous Therapy in Jewish Medical Ethics (Targum Press: 2010), 106.

⁵ Nishmat Avraham, Yoreh De'ah 339:4(iii), p. 501 in 3rd edition; Lev Avraham 32:10 #6.

We can thus say that the halakhic imperative is that as long as we can keep people alive, we must do so, unless the benefit of such actions is counterbalanced by their causing extreme pain and suffering. At that point, the Torah permits a compassionate response of allowing the death process to occur with appropriate palliative care if that is what the patient or his surrogate desires and a competent rabbi has ruled accordingly for that specific case.

It is crucial to emphasize that even if a DNR order has been initiated, as long as the patient is still alive, doctors must continue to provide attentive care and all the basic necessities of life, as well as make certain that the patient does not suffer. Oxygen is usually considered basic care and should be provided to all patients for whom it is medically indicated. Therefore, if artificial respiration (intubation) is withheld at any point, oxygen supplementation and/or a noninvasive positive pressure airway device should still be provided to alleviate discomfort, such as via a face mask or nasal prongs. 10

Furthermore, it is important to note that although Halakhah sometimes permits, and may demand, that a dying patient forgo resuscitation or intubation, there is much debate concerning when a tube may be removed from the patient's lungs (extubated) once the patient has already been placed on the respirator.¹¹ It is generally permitted only to withhold life

termine the patient's wishes, we are not obligated to request aggressive interventions because we assume that they would not want a life of suffering to be prolonged (*Teshuvot Ve-Hanhagot* 6:300).

⁹ Encyclopedia Hilkhatit Refuit, vol. 5, 156. Nishmat Avraham, Yoreh De'ah, p. 325 (#6) (English edition), makes the point that even in those circumstances in which a DNR order is permissible according to Halakhah, all nursing care necessary for the patient's comfort must be administered. A DNR must never be viewed as a DNT (Do Not Treat).

¹⁰ Dr. Avraham Steinberg, personal communication, Summer 2015; See also *Iggrot Moshe Ch"m* 2:73(1). However, it would not be permissible to extubate a patient who is respirator dependent simply because one switches them to a breathing mask because the patient will still die very shortly after the extubation.

¹¹ Extubation is desirable when the goal is to wean a patient off of a

sustaining interventions; it is forbidden to withdraw them once they have begun (even if they are not basic, essential treatments).¹² It is important to consider this when the decision is made whether or not to intubate.

Accordingly, when consulting a rabbinic authority on DNR questions, it is essential to clarify if there is a plausible cure or possibility for remission in the patient's underlying illness, if the patient is in severe pain, his or her desires, and if the resuscitation procedures are likely to inflict severe discomfort in this patient.¹³

Options: Comfort Measures, Limited Interventions, and Full Treatment

Establishing the halakhically acceptable level of treatment for a given patient in many ways hinges on the approach to the first issue discussed above. In a situation in which a DNR would be permitted, "comfort measures" may be permitted as well. This means that aggressive medical interventions will not be pursued at the end of life and the patient will be allowed to die a natural death. The patient will, however, receive medication to ensure that he does not experience overwhelming pain or other significant distress associated with death. Narcotic pain medications, such as morphine, are often prescribed for patients with terminal diseases to alleviate suffering near the

ventilator so that they can survive without it; if he cannot survive without ventilation, the patient would have to remain intubated. See *Iggerot Moshe*, *Yoreh De'ah* 3:132; *Nishmat Avraham*, *Yoreh De'ah* 339:1(4), pp. 602-606 (3rd edition); Bleich, *Time of Death in Jewish Law*, (Z. Berman Publishing: 1991), 50.

¹² Encyclopedia Hilkhatit Refuit, vol. 5, 148.

¹³ R. Avraham Union, *Le-Et Metzo* (VITAS Innovative Hospice Care/Rabbinical Council of California: 2015, 3rd ed.), 13. Although this was not mentioned as one of the conditions listed above, it is important to ask this question because in a case of a dying patient who is rapidly declining, we would not be required to inflict such pain for no avail (R. Union, personal correspondence, Winter 2015).

end of life.

The alleviation of pain and suffering is a *mitzvah*¹⁴ and should not be withheld out of concern for potential adverse effects. ¹⁵ It is halakhically permitted for patients to receive narcotic pain medication, ¹⁶ even when it may possibly hasten their death, provided that:

1. The intent is only to alleviate pain, not to shorten the

patient's life.

2. The dose of medicine is gradually increased as necessary to alleviate the pain, but each dose on its own is not enough to certainly shorten the patient's life.¹⁷

The option of "limited interventions" should often be

14 R. Shlomo Zalman Auerbach argues that alleviating pain falls under the obligation to love one's neighbor as oneself (Responsa *Minhat Shlomo* 2-3:86). The *Tzitz Eliezer* (13:87) argues that severe pain is considered debilitating and dangerous, and administration of sophisticated pain medications is considered part of a physician's mandate to heal, which classical *posekim* permitted even in risky scenarios if the intention is to relieve pain.

15 Reponsa *Minhat Shlomo* 2-3:86. The concerns are related to opioids' potential to suppress breathing. However, current medical data suggests that judicious use of opioids does not usually shorten the life of terminally ill patients (Mularski RA, Puntillo K, Varkey B, Erstad BL, Grap ML, Gilbert HC, Li D, Medina J, Pasero C, Sessler CN, "Pain Management Within the Palliative and End-of-Life care Experience in the ICU," *Chest* 135 [2009]: 1360–1369).

Health care professionals can offer patients and families choices for pain control. For example, patients who are alert may choose to receive adequate medication to keep them as comfortable as possible while retaining the ability to communicate. Others may prefer that medication be chosen for maximum comfort even if it renders the patient less responsive (Loike, Gillick, Mayer, Prager, Simon, Steinberg, Tendler, Willig, Fischbach, "The Critical Role of Religion: Caring for the Dying Patient from an Orthodox Jewish Perspective," *Journal of Palliative Medicine* 13:10 (2010):2.

16 Tzitz Eliezer 13:87; Teshuvot Ve-Hanhagot 3:361; J. David Bleich, "Survey of Recent Halakhic Literature: Palliation of Pain," Tradition 36:1 (2002): 89; Shiurei Torah Le-Rofim, vol. 3, 396.

17 Nishmat Avraham, Yoreh De'ah 339:1 (4), p. 499 in 3rd edition.

considered as well, as many halakhic authorities distinguish between treatments that supply natural necessities and those that are considered "aggressive" and not routine. Basic treatments that are unrelated to the patient's primary illness – such as oxygen, nutrition, and hydration – and those that any other patient would receive to prevent complications – such as insulin for a diabetic, antibiotics, ¹⁸ and blood transfusions – should generally not be ceased, as doing so may hasten death. On the

18 Although antibiotics must be given even to a DNR patient whenever needed, as with any other patient they may be discontinued when the patient has responded to the medication and has had the full dose. If one does not respond, or the lab results demand some other intervention, the antibiotics are changed as medically necessary. If lab results confirm than an antibiotic has been given unnecessarily then, as with any other patient, it must be stopped (personal communication with Dr. Abraham, Feb. 2015). Additionally, at the end of life, when a patient is suffering and expert medical opinion assumes that there is no chance of a recovery, and life expectancy is estimated to be very short, some rule that supportive medications such as dopamine or very advanced antibiotics need not be renewed once the IV bag has run out (Dr. Avraham Steinberg, in consultation with R. Auerbach and R. Wosner, "Halachic Guidelines for Physicians in Intensive Care Units," Assia 4:1 (February 2001), 5-6, reprinted in Jewish Medical Ethics, vol. 2 (Jerusalem, 2006), 376-8). This is because antibiotics are only required when they can actually cure an infection. For example, if a dying patient develops an additional illness, such as pneumonia, if it is treatable (i.e. with antibiotics) we must do so in order to prolong the patient's life, even though he or she is dying of the underlying illness anyways. However, if the patient develops a very significant secondary illness, such as an overwhelming sepsis, and the regular antibiotics won't resolve it, then the sepsis becomes considered as part of the dying process. Even though complicated fifth generation antibiotics could be attempted to keep the patient alive slightly longer, this illness is now part of the dying process and the advanced antibiotics needed to fight it are not required, unless a specific bacteria that caused the sepsis can be identified and advanced antibiotics can indeed cure it (Dr. Avraham Steinberg, personal communication, Summer 2015; See also Iggrot Moshe CH"M 2:74(2) & 75(4) and Nishmat Avraham YD 339:4(iii), pg. 503 in 3rd edition). Furthermore, in situations in which placing an intravenous (IV) catheter for antibiotic administration will lead to excessive pain, IV antibiotics may be withheld (personal communication with Dr. Abraham).

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other hand, it is often not required to actively treat or initiate aggressive measures – such as surgery, radiation, or chemotherapy with minimal projected benefit¹⁹ – for a dying patient who is suffering and does not want them, if a competent rabbi has ruled accordingly.²⁰ A patient who opts for limited interventions in a POLST will be administered IV fluids and may choose to be respirated in a non-invasive fashion. Alternatively, a patient may record that he wishes full interventions to be made under all circumstances.

Artificially Administered Nutrition

Secular POLST documents include the option to refuse nutrition and hydration, reflecting the standard approach in American society, which views artificial nutrition as a medical treatment that can be withdrawn if necessary. In contrast, there is a very strong consensus among rabbinic authorities that artificial nutrition and hydration must be provided to all patients, whether conscious or comatose – even artificially,²¹

¹⁹ R. Union, Le-Et Metzo, 15. Dr. Abraham clarified in a personal conversation that all major surgical procedures are not considered routine, and as a rule of thumb most procedures for which informed consent is required to be signed are not considered routine. It should be noted that norms for what is routine or not routine can change over time as the practice of medicine evolves, and the input of a rabbinic authority who is familiar with these details is essential.

²⁰ Nishmat Avraham, Yoreh De'ah 339:4 (7), pp. 498, 509 in 3rd edition; Lev Avraham 32:10; Teshuvot Ve-Hanhagot 6:300; Steinberg, "The Halachic Basis of the Dying Patient Law," Assia 6:2 (2008): 30-40.

²¹ Nishmat Avraham YD 339:4 (7), pg. 509 in 3rd ed.; Lev Avraham 32:10 (1); Encyclopedia Hilkhatit Refuit, vol. 5, 146. Nutrition and hydration must usually be provided, even artificially, despite the fact that one is not always required to proactively pursue mechanical ventilation, because Jewish Law does not see the provision of nutrition and hydration as a medical intervention but simply as providing the vehicle for bringing natural nutrition to the body. This does not rise to the level of a medical intervention, however, since the food being provided is a basic necessity. A ventilator, on the other hand, must be carefully gaged and continuously adjusted, and is thus seen as a medical intervention and is

such as via an NG tube or PEG²² – unless medically contraindicated.²³ This is based on the ruling, discussed above, that distinguishes between treatments that supply natural necessities or are accepted as routine, which are required, and those that are considered "aggressive," which are not always obligatory. Halakhic authorities have further ruled that nutrition and hydration may not even be passively discontinued from a dying patient to hasten their death.²⁴

therefore not always required in every situation. However, oxygen by mask should always be provided since this is a similar to nutrition and hydration being a natural sustenance and not a treatment (Dr. Avraham Steinberg, personal communication, Summer 2015).

22 Nishmat Avraham, Yoreh De 'ah 339:4 (7), p. 509 in 3rd edition; Lev Avraham 32:10 (1); Encyclopedia Hilkhatit Refuit vol. 5, 146. When given the option, some recommend choosing a PEG over an NG Tube since it is generally more comfortable and results in fewer complications (Dr. Avraham Steinberg, personal communication, Summer 2015).

23 Encyclopedia Hilkhatit Refuit, vol. 5, 146; Shiurei Torah Le-Rofim, vol. 3, 320; Iggerot Moshe, Hoshen Mishpat 2:74 (3); Minhat Shlomo 91:24. One of the few authorities who allow withdrawal of nutrition/ hydration from a terminal patient is R. Zalman Nechemia Goldberg, who argues that we are obligated to save such a patient only when the patient benefits from being saved. However, there is no obligation to treat a patient who is suffering so much that "death is better than life" or one who has absolutely no cognition or ability to communicate. R. Goldberg claims that withdrawing nourishment would not be considered an indirect cause of death because it is the overall lack of nourishment that the patient dies from, not the action of removing nourishment (Moriah 4-5:88-89 [Elul 5738]: 48-56). Many other authorities have challenged R. Goldberg's position; see, for example, R. Levi Yitzchak Halperin, Halakhah U-Refuah (Regensberg Institute: 1981), vol. 2, 146-84, esp. 150-55; R. J.D. Bleich, Bioethical Dilemmas (KTAV Publishing House: 1998), vol. 1, 106, fn. 36; R. Y. Zilberstein, Shiurei Torah Le-Rofim, vol. 3, 317. R. Halperin argues that withholding nourishment should be viewed as an indirect cause of death and is thus forbidden. He sees no difference between one who disconnects the food supply from the patient and one who acts passively and neglects to replenish it.

24 Minhai Shlomo 91:24; Iggerot Moshe, Hoshen Mishpat 2:74(3); Encyclopedia Hilkhatit Refuit, vol. 5, p. 146. See also J. Kunin, "Withholding Artificial Feeding from the Severely Demented: Merciful or Immoral? Contrasts Between Secular and Jewish Perspectives," Journal of Medical Ethics (2003): 208-212.

If a patient refuses to accept these feedings, one should encourage him to accept them. If he still refuses, however, he should not be forced,²⁵ nor should one utilize coercive methods such as tying down the patient's hands to prevent him from pulling out the tube.²⁶ If the patient is competent and expresses clear opposition to a feeding tube, his desire should be granted.²⁷

There are some circumstances in which artificial nutrition and hydration may be discontinued in accordance with Halakhah. Patients nearing the end of life often lose interest in eating or have difficulty swallowing or absorbing their intake, which can lead to infections, choking, and aspiration. In such cases, it is sufficient to make patients comfortable by providing minimal feeding by mouth, such as using menthol swabs or ice chips, instead of IV feeding.²⁸ Moreover, there are times when the provision of artificial nutrition and hydration very close to the time of death is not only dangerous for the patient, but also actually increases the patient's discomfort. Since some base the obligation to continue nutrition and hydration on the assumption that death by starvation or dehydration increases the intensity of the pain and suffering of a dying individual,²⁹ there may be situations in which the focus should instead be on providing comfort measures, as discussed above. 30 Rabbinic authorities thus rule that if a dying patient will likely die as a result of their underlying illness before dying of lack of nutrition and the patient does not want nutrition, there is no obligation

²⁵ Iggerot Moshe, Hoshen Mishpat 2:74. Other authorities rule that we should even try to force the patient; see Minhat Shlomo 91:24.

²⁶ Loike, et. al., op cit., 3.

²⁷ Ibid.

²⁸ Encyclopedia Hilkhatit Refuit, vol. 5, 147; A. Steinberg, "The Use of Percutaneous Endoscopic Gastrostomy (PEG) in Demented Patients: A Halachic view," Journal of Jewish Medical Ethics and Halacha 7 (2009): 41–42; Encyclopedia Hilkhatit Refuit, vol. 5, 112.

²⁹ Iggerot Moshe, Hoshen Mishpat 2:74 (3).

³⁰ Bleich, Bioethical Dilemmas, vol. 1, 94.

to initiate artificial nutrition.³¹ Sometimes this is possible by providing some basic IV or subcutaneous (minimally invasive) hydration to ensure that the patient does not die of dehydration.³² Similarly, if a patient has no chance of survival and is suffering, one may switch from total parental feeding (TPN) to nasogastric or even to IV feeding, and the IV content may be reduced from concentrated nutrients to basic glucose and electrolytes in water.³³

³¹ Lev Avraham 32:10 (2). If artificial nutrition has already been initiated, complete withdrawal is forbidden if it will hasten death; see Nishmat Avraham, Yoreh De'ah 339:4 (7), p. 509 in 3rd edition.

³² Encyclopedia Hilkhatit Refuit, vol. 5, 147. This is because a person will normally die much quicker without hydration than they will without food, so even in a situation in which we may not be required to provide nutrition at the end of life, providing hydration is nevertheless encouraged. However, even hydration should be monitored according to the medical situation, not according to philosophical-ethical considerations (Dr. Avraham Steinberg, personal communication, Summer 2015).

³³ A. Steinberg, "The Halachic Basis of the Dying Patient Law," Jewish Medical Ethics (Jerusalem, 2011), vol. 3, 419 (republished from Steinberg, "The Halachic Basis of the Dying Patient Law," Assia 6:2 (2008): 30-40). See also Steinberg, Encyclopedia of Jewish Medical Ethics (New York, 2003), 1058.

RABBI DR. JONAH BARDOS

Palliative Sedation: Termination or Palliation? An Ethical Analysis

Introduction

One of the greatest debates in end-of-life care relates to what some call the "right to die" and what others call physician-assisted suicide or euthanasia. This debate has even been presented before the US Supreme Court, which ultimately ruled that while euthanasia is illegal, pain relief is a protected interest. Since euthanasia remains illegal in the United States, palliative medicine has looked for other methods to help patients suffering from pain at the end of their lives, and the field of palliative medicine has made great strides in advancing and improving end-of-life care. This article will discuss one method of pain relief called palliative/terminal sedation, which has been the subject of controversy.

Terminology and Definitions

The VA ethics board defines terminal sedation as "sedating a patient to the point of unconsciousness to relieve one or more symptoms that are intractable and unrelieved despite aggressive symptom-specific treatments and maintaining that

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condition until the patient dies," or, as some writers have put it, "sedation until death follows." Indeed, the way in which the treatment is defined is reflected in the terminology used to describe it, and its definition also has ethical and moral implications.

Some feel that this procedure is merely a mask for euthanasia – using sedation to terminate the patient – and they therefore refer to it as "terminal sedation." This terminology was first used by Enck in 1991. However, many have expressed dissatisfaction with this term, as it creates the impression that the purpose of the sedation is to cause death. The term "palliative sedation," in contrast, implies that the purpose and goal of the treatment is palliation, a normative medical practice, and not a backhanded attempt to terminate or euthanize the patient. For the purposes of this paper, I will use the AMA's terminology of palliative sedation.

Who Receives Palliative Sedation?

Palliative sedation is offered to patients who have severe, intractable symptoms that have not responded to any other treatments. The AMA's judiciary ethics board report suggests:

Palliative sedation to unconsciousness is only appropriate for terminally ill patients as an intervention of last resort to reduce severe, refractory pain or other distressing clinical symptoms

^{1 &}quot;The Ethics of Palliative Sedation: A Report by the National Ethics Committee of the Veterans Health Administration" (National Center for Ethics in Health Care, 2006), 2.

² J. Van Delden, "Terminal Sedation: Source of Restless Ethical Debate," *J Med Ethics* 33 (2007): 187-8.
3 Ibid.

⁴ L.J. Materstvedt, "Deep and Continuous Palliative Sedation (Terminal Sedation): Clinical-Ethical and Philosophical Aspects," *Lancet Oncol* 10 (2009): 622–7.

that have not been relieved by aggressive symptom-specific palliation. Specifically, such clinical symptoms include pain, nausea and vomiting, shortness of breath, agitated delirium, and dyspnea. ⁵

The VA paper discusses some of the indications for palliative sedation and suggests that the procedure should only be performed on patients who are "near death, severely suffering, with unremitting symptoms whose pain cannot be controlled with conventional methods." The general consensus is that palliative sedation should only be used in limited cases, when the patient is in severe pain, near death, and there are no other options.

What Does Palliative Sedation Entail?

In order to treat the intractable pain and suffering, the patient is sedated to the point of unconsciousness, with the intent of keeping him in that state until his death. Usually, along with the sedation, artificial nutrition and hydration are withdrawn. In fact, Reitjen defines palliative sedation as unconsciousness in addition to removal of artificial hydration and nutrition.⁷

Not everyone agrees with this definition, however. While there is broad agreement that a DNR is required in order to undergo palliative sedation, debate persists regarding whether other life-sustaining treatments – such as hydration, nutrition, dialysis, and vent support – should be supplied.

⁵ Dr. M.A. Levine, "Report of the Council on Ethical and Judicial Affairs: Sedation to Unconsciousness in End-of-Life Care," accessed at http://www.ama-assn.org/resources/doc/code-medical-ethics/2201a.pdf. 6 "The Ethics of Palliative Sedation: A Report by the National Ethics Committee of the Veterans Health Administration" (National Center for Ethics in Health Care, 2006), 2.

⁷ J. Rietjens, "Terminal Sedation and Euthanasia: A Comparison of Clinical Practices," *Archives of Internal Medicine* 166 (2006): 749-53.

Some argue that supplying life-sustaining support along with palliative sedation unnecessarily prolongs dying. This approach seems to tread a fine line. What is the intent of these doctors in performing palliative sedation? Are they trying to remove pain or cause death? It seems that the dual requirement approach is much similar to PAS/euthanasia; the fact that the doctor does not want to perform the procedure if it will slow the dying process reveals that the intent of the physician is to hasten death. Apparently, these doctors feel that palliative sedation is simply a means to an end, and if the goal will not be achieved quickly from the intervention, it should not be performed.

The VA paper notes that many patients' cultural and religious traditions emphasize relieving pain **and** prolonging life. These traditions prohibit foregoing life-sustaining treatments, and thus would require nutrition and hydration. Physicians have a prima facie obligation to respect these traditions. The VA ethics board concludes that the decision to forego treatment should be made independently of the decision for palliative sedation; one should not be required to forego life-sustaining treatment in order to receive palliative sedation. This is more in keeping with the idea that palliative sedation is intended as a treatment for pain, not as a means to the end of death.

The VA paper notes that most patients this close to death would have stopped eating and drinking naturally. If we create a situation in which the patient will not be able to eat by sedating him, and then we fail to provide him with nutrition, what is actually causing the patient's death? Some argue that it is the underlying disease, while others maintain that it is the physicians' actions or forced starvation. If death is the result of the physicians' actions, those actions might be characterized as "slow euthanasia."

Is Palliative Sedation Euthanasia?

This brings us to the crux of the discussion. Is palliative sedation a legitimate form of medical care, or is it simply an alternative form of euthanasia? Euthanasia is defined as an action performed by a physician with the intent of causing the patient's death. Is palliative sedation performed in the same way or for the same purpose as euthanasia? We might distinguish between the two based on circumstances in which they are performed, the timing of death following the physicians' actions, or the intent of the physician in each case.

In the Netherlands, both palliative sedation and euthanasia are legal and performed. Reitjens reports that euthanasia was requested by patients when they had a perceived loss of dignity, which may be at an earlier point than when palliative sedation is performed. On the other hand, requests for palliative sedation most often were related to severe pain with physical and psychological suffering in dying patients. Thus, palliative sedation is performed in distinctly different circumstances than euthanasia.

How long after initiation of palliative sedation does death ensue? If it occurs right away, that would imply that the physician's action directly causes the patient's death. If it occurs later on, that might imply that many other factors are responsible for the patient's death. Reitjens' study found that with euthanasia, death occurred within one hour in 94 percent of the cases, whereas with palliative sedation, the majority of the deaths occurred between 1 day and 1 week after the procedure began. This time separation would seem to indicate that there is less of a direct correlation between the death of the patient and the action initiated by the physician in palliative sedation than in the case of euthanasia.

Various ethical and legal discussions, including the AMA paper, the VA paper, and Supreme Court opinions, have distinguished euthanasia from palliative sedation based on in-

want to do? The prevailing view in the bioethical community is that the intent of the physician is the central deciding factor in determining whether the action falls under the rubric of euthanasia. When performing euthanasia, the intent of the physician is to terminate the patient's life, with the result that his suffering ends. In palliative sedation, the intent is to relieve the suffering, and death occurs as a result of the underlying disease process.

Many feel that the intent is reflected in practice. In palliative sedation, doctors give enough medications to sedate, but not to kill. The practitioner knows how much sedation to give to create unconsciousness, but nothing more than that. This may be different from a case in which morphine is given to treat pain and doctors know that the next dose has the possibility of suppressing the respiratory drive. In the latter case, we invoke the ethical and legal principle of "double effect;" although the administration of morphine may directly cause the patient's death, since the act of administrating pain-relief is itself legitimate, we consider it acceptable. In the case of palliative sedation, medication is carefully administered so as to avoid this problem, so that it may in fact be even less problematic than circumstances in which we invoke the double effect principle.

Not all agree with the intent distinction. Battin strongly disagrees with the AMA report and feels that an attempt to differentiate the intent of the practitioner based on observed practice is immoral and "draws this false bright line." In order to determine the status of palliative sedation, we must determine what exactly is killing the patient.

The general ethical consensus is that even when palliative sedation is performed along with withdrawal of nutrient and hydration, the underlying cause of death is the disease process. The only action that occurs here is the action of sedation;

⁹ M. Battin, "Terminal Sedation: Pulling the Sheet Over our Eyes," Hastings Center Report 38: 5 (2008): 27-30.

the physician merely is passively omitting artificial hydration and nutrition. ¹⁰ However, one could argue that death is actually occurring because life-sustaining treatments have been removed, not due to the underlying illness. If that is true and we evaluate the ethics of palliative sedation based on what is killing the patient, palliative sedation might indeed be evaluated simply as a form of slow euthanasia. According to that argument, however, we would have to explain why it is considered legally and ethically acceptable for a patient to forgo life-sustaining treatment, in which case we assume that he dies from the underlying disease process and not due to the action of the physician.

One interesting question to consider is if our evaluation of "double effect" situations should reflect whether the outcome, even if it was not the intent, was desirable. Does a desirable outcome somehow play a role in the intent analysis? Does the fact that I desired the outcome somehow reveal my intention in retrospect?

According to the VA and AMA papers, the dominant view in the medical and bioethical communities is that based on the intent analysis, palliative sedation is not PAS or euthanasia. We will later explore how Judaism uses the intent analysis in evaluating pain relief at the end of life.

Legality of Palliative Sedation

Palliative sedation can be looked at as two distinct acts – one of foregoing life sustaining treatment and one of sedating the patient to treat pain. Each action in and of itself has legal precedence. There is an accepted legal and ethical practice to respect patient autonomy to forego life-sustaining treatment, 11 and the legal basis for palliative sedation derives from the landmark cases on PAS, Vacco v. Quill and Washington v. Glucks-

¹⁰ Against this claim, some argue that moral evaluation of an act does not depend on whether that act was active or passive; Van Waldern, ibid. 11 ln re Quinlan 70 N.J. 10, 355 A.2d 647 (NJ 1976).

berg.¹² Annas points out that "at least five members of the court seem to think there is something akin to a right not to suffer, at least when death is imminent." The US Supreme Court distinguished between palliative sedation and assisted suicide and seemed to indicate a strong support of symptom relief for dying patients, even to the state of unconsciousness.

We have seen the prevailing ethical and legal views, which categorize palliative sedation not as euthanasia, but rather as a legitimate and ethical treatment for pain at the end of life. How does Judaism, a religion which places the value of life above almost every other value, categorize palliative sedation?

Life Sustaining Treatments and Passive Euthanasia in Halakhah

The halakhic approach to end-of-life care is extremely complex, and this brief article certainly cannot do it true justice. We will suffice here with a brief summary of the predominant view regarding the withholding of artificial nutrition and hydration (passive euthanasia), as well as the Jewish perspective on the importance of treating pain, and we will then consider how these might apply to palliative sedation.

Fred Rosner, a noted physician and Jewish medical ethicist, writes that "Jewish law holds that life in it of itself represents a purpose and is endowed with moral value." However, he notes, "life in excessive pain and suffering is not an acceptable quality of life in Judaism." Initiation of "heroic measures" (respirators and resuscitation) are not necessary in the final moments of life for someone who is terminally ill and suffering. However, once they are initiated, they cannot be stopped until the patient dies.

Rosner writes that nutrition and hydration are basic

¹² Vacco v. Quill, 521 U.S. 793 (1997), Washington v. Glucksberg, 521 U.S. 702 (1997).

¹³ G. Annas, "The Bell Tolls for a constitutional right to physician assisted suicide. NEJM, Vol 337, no. 15 (1997) 1098-1103

needs; they are not considered "artificial" simply because they are given via IV or tubes. Despite the medical community's change of heart, nutrition and hydration are normal, supportive measures, not extraordinary therapy, and they therefore may not be stopped. ¹⁴ Although Rosner presents a helpful summary, not all Rabbinic authorities would agree with these generalities.

R. Shlomo Zalman Auerbach (1910–1995) rules that there is no obligation to treat a patient when the treatment will cause additional suffering. However, this ruling only applies if the patient is terminal with no disease-specific treatment available, the treatment in question is not routine, and the patient does not want continued treatment due to the pain and suffering.¹⁵

According to R. Auerbach, "routine treatments" include oxygen, nutrition, and hydration. These may not be withheld at any stage. He would insist that nutrition be given via a nasogastric tube, or even intravenous (parenteral) nutrition. ¹⁶ Thus, although not every situation would demand that a patient be placed on a respirator, once a patient is placed on the respirator, he may not be removed from it.

R. Auerbach notes that if a patient goes into cardiac arrest as a natural progression of his underlying disease, there is no requirement to intervene with the heroic measures of CPR and intubation. However, if the arrest is due to some other cause not associated with the terminal disease – for example, as a result of pneumonia – one would have to treat the arrest.

R. J. David Bleich writes that there is no obligation to prolong the life of a patient who suffers from intractable, severe pain. He bases this on the idea that one is only obligated to save a life at the expense of his entire fortune. If one is in such severe pain that he would give up his entire fortune, there is no longer

¹⁴ Rosner F, Abramson N. Fluids and nutrition: perspectives from Jewish Law (Halachah). South Med J. 2009 Mar; 102(3):248-50.

¹⁵ Based on Nishmat Avraham, vol. 2, Yoreh Deah, 339:4.

¹⁶ Shulhan Shlomo, Erkhei Refuah.

an obligation to heal himself.

R. Bleich limits this to only severe, intractable pain. In his view, most pain is simply not adequately treated; one must first obtain adequate treatment before this ruling would apply. However, based on this view, there is no distinction between routine and heroic measures. Thus, it is possible that in the limited circumstances of severe, intractable pain, one could withdraw oxygen, nutrition, and hydration.¹⁷

R. Moshe Feinstein (1895–1986), the acknowledged halakhic authority in America in his time, wrote a number of responsa regarding the treatment of the terminally ill. His general perspective is that it is permitted to withhold certain treatments when the patient is suffering from intractable pain. He even goes so far as to say that if a patient refuses such a treatment, it is forbidden to attempt to treat him. ¹⁸

R. Feinstein writes that the premise that permits us to withhold treatment when a patient is suffering is that the intended treatment would increase suffering. Therefore, one may not withhold any treatment if so doing would itself increase suffering. Thus, he writes that one may not withhold oxygen, as that would increase the patient's suffering. 19 Nutrition and hydration must be provided as well, as these strengthen the patient. However, if the patient were to refuse nutrition and hydration, disregarding his view might actually put him at risk. Therefore, in such circumstances, R. Feinstein permits withholding nutrition and hydration.²⁰ Regarding withdrawal of a respirator, R. Feinstein rules that as long as the machine is functioning, one may not disconnect it; however, one may wait until the oxygen runs out and then see if the patient is still breathing.21 (Nowadays, this could only happen if the patient were being transported on a respirator, as any bed with a ven-

¹⁷ J.D. Bleich, "Treatment of the Terminally Ill," *Tradition* 30:3 (1996): 76.

¹⁸ Iggerot Moshe, Hoshen Mishpat 2:73:1; Yoreh De'ah 2:174:3.

¹⁹ Ibid., Hoshen Mishpat 2:74:1.

²⁰ Ibid., Hoshen Mishpat 2:74:3.

²¹ Ibid., Yoreh De'ah 3:132.

tilated-patient would have oxygen flowing from a central wall unit; it would be very unlikely that the oxygen would run out.)

R. Eliezer Waldenberg (1915-2006) maintains what is perhaps the most stringent opinion regarding withholding treatment in terminal patients. R. Waldenberg rules that the only patient for whom treatment may be withheld is a patient who has permanently and entirely lost both brain and heart function, as such a patient has no intrinsic "life force." All other patients, in his view, must receive full care, and their lives must be extended as long as medically possible.²² R. Waldenberg bases this view on the concept that all life is precious, even if one is suffering terribly. Such suffering can cause someone to repent and gain a spot in the world to come.²³ In order to determine if the patient has lost the ability to breathe on his own, R. Waldenberg suggests that the respirator be connected to a timer that periodically turns the machine off so that the doctors can evaluate independent breathing. If it is determined that there is irreversible loss of brain function (and consequently respiration, as the brain stem is responsible for respiratory function), the patient may be disconnected from the respirator.

Pain Relief

According to R. Ari Zivotofsky, there is broad consensus mandating the use of aggressive pain control even when there is a great risk involved, provided that the motivation is for pain relief.²⁴ The halakhic authorities invoke the principle of intent in their discussions of this topic.

R. Feinstein maintains that although it is not necessary to treat a suffering terminally ill patient and there is no obligation to do everything possible to heal when a cure is no longer

²² Tzitz Eliezer 13:89; 14:80; 14:81.

²³ Ibid., vol. 5 Ramat Rahel 28; 14:80.

²⁴ A. Jotkowitz and A. Zivotofsky, "Love Your Neighbor Like Yourself: A Jewish Ethical Approach to the Use of Pain Medication with Potentially Dangerous Side Effects," *J Palliative Med* 13:1 (2010): 67-71.

possible, one cannot perform any action that will cause the patient to die quicker even by one minute. It is unclear whether R. Feinstein is referring to the intent of the administration of the medication or its outcome. Interestingly, in a few contexts, R. Feinstein writes that pain relief can help a patient live longer, even though that was not the prevailing medical view at his time.²⁵

R. Waldenberg writes that "if oral medications or injections are given for the purpose of palliation of pain by the physician, even if they have the potential to harm or even shorten the patient's life, it is permitted." He quotes Nahmanides, who writes that "all medications are dangerous and have the potential to cure some patients and harm others." We can glean two important points from these statements. First, palliation of pain is an important value; second, the intent and motivation of the physician's treatment must be for pain relief. 28

In responding to a question regarding the use of narcotics in treating terminaly ill patients, R. Auerbach writes, "It is obvious that this is [permitted] only when the intention is to treat the pain and the potential to harm the patient is an unintentional and undesired consequence of another act (emphasis added)."²⁹

R. Bleich maintains that not only is palliative sedation allowed, it is **mandatory**. He also invokes the idea of intent; palliative sedation is allowed only when the intent is for pain relief and not to kill the patient. In addition, it is only permitted provided that life-sustaining treatment is not withdrawn.³⁰ Similarly, R. Moshe Dovid Tendler maintains that "once a patient has declared his life as not worth living due to the pain,

²⁵ lbid.

²⁶ Ibid., vol. 5 Ramat Rahel 28; 14:80.

²⁷ Ibid

²⁸ A. Jotkowitz and A. Zivotofsky, "Love Your Neighbor Like Yourself: A Jewish Ethical Approach to the Use of Pain Medication with Potentially Dangerous Side Effects," *J Palliative Med* 13:1 (2010): 67-71.

²⁹ Minhas Shlomo, Mahadura Tanina, 2-3:86.

³⁰ Personal communication, March 29, 2012.

palliative sedation would be permitted provided the intent is not to kill the patient. However, one may not simultaneously forego any life sustaining treatments."31

In the view of these authorities, palliative sedation would be an acceptable treatment for unremitting pain and suffering. However, they would prohibit the simultaneous withdrawal of artificial nutrition and hydration. Palliative sedation is a halakhically permissible option – and may even be obligatory – as long as the purpose is palliation and not to shorten the patient's life. Halakhah does not reflect the view that palliative sedation is akin in any way to physician-assisted suicide or euthanasia.

³¹ Personal communication, March 29, 2012.

DR. AVIVA BERKOWITZ

Autopsies and Cadaver Dissections in Anatomy Courses

Introduction

The halakhic evaluation of the dissection of cadavers during anatomy courses or in the context of other scientific endeavors touches upon a wide range of legal issues as well as many fundamental philosophical questions. The religious challenges range from the very clearly outlined and quantitative laws pertaining to monetary benefit from forbidden objects to the more esoteric concepts of souls entering heaven.

This essay will survey the Jewish sources on the topic, spanning from the Biblical verses and Talmudic passages through contemporary positions. Our focus will be on the propriety of using dead bodies for medical and scientific study. We will not address the issues surrounding the controversial methods that are sometimes employed in order to obtain the cadavers. Hopefully, it is a given assumption that any unethical method that that involves harming living human beings or pressuring the imprisoned or sick to donate their organs is immoral and transgresses numerous halakhic prohibitions.

Disgracing a Dead Body - Bizayon Ha-Met

In evaluating the dissection of cadavers, the first issue

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that must be addressed is the concern of disgracing the body of the deceased, bizayon ha-met. A central source on this topic is a gemara in Hullin regarding the possible autopsy of murder victims. The gemara states that courts may not inflict the death penalty on a murderer who killed a tereifah (a person who has a physical sign indicating some sort of terminal illness that would have killed them within a year). On the other hand, the Torah requires that beit din kill convicted murderers. This being the case, the gemara suggests that we must rely on the rov, the principle of the majority - we rely on the assumption that most people are not tereifot, and we can therefore execute convicted murderers. In an attempt to refute this suggestion, the gemara questions whether beit din performs an autopsy on the victim in order to conclusively prove that he was not a tereifah. The gemara responds that such a procedure should not be performed, as it is a "nivul," a disgrace to the deceased. Furthermore, even though such a nivul would be permitted in order to save a life (and therefore could potentially be permitted in order to exonerate the accused murderer and spare him from the death penalty), an autopsy should still not be performed in this particular case, as the murder wounds would make the findings less conclusive.

There are two important implications of this *gemara*: 1) In general, post-mortem dissections are considered *bizayon hamet* and are therefore forbidden. 2) Such procedures are permitted when there is a significant reason to do so, such as saving a life (although not in the specific circumstance mentioned in the *gemara*).

While the *gemara* indicates that the concern of *bizay-on ha-met* sharply limits the acceptability of corpse dissection to certain circumstances, the question remains what precisely those circumstances are. What type of situation is considered life-saving? Furthermore, the discussion in the *gemara* relates to a case of a Jewish murderer and a Jewish victim, and the subsequent discussion in the *gemara* seems to pertain primarily to

¹ Hullin 11b.

Jewish corpses. Does this indicate that the concern of *bizayon* ha-met applies only to Jews or that it is stricter with regard to Jews?

Burial Requirement

Another fundamental issue regarding the use of cadavers relates to the requirement to bury a corpse. The requirement of burial — as opposed to other methods of corpse disposal, such as cremation — is assumed to be a Biblical law. The Torah commands that in some cases, after a sinner is put to death by beit din, his body must be publically hung. However, "His body shall not remain for the night on the gallows; rather, you shall surely bury him on that day." Most commentators assume that the requirement to bury a corpse is not limited to the case of a public execution; rather, all Jewish bodies must be buried in a similar manner. Indeed, the prophet Amos declares that one of the unpardonable transgressions of the nation of Moab is that they cremated the remains of the King of Edom.³

Shulhan Arukh rules that while there is a Biblical obligation to bury Jewish corpses, there is no such inherent law regarding gentiles; Jews are required to bury non-Jews due to the principle of darkei shalom, maintaining peaceful relations with our non-Jewish neighbors. This distinction led some authorities to conclude that it is more problematic to dissect a Jewish cadaver than that of a gentile, since there is no inherent mitzvah to bury a non-Jew. However, there are many other considerations that must be taken into account as well.

² Devarim 21:23. See Ramban there.

³ Amos 2:1

⁴ Yoreh De 'ah 367:1. This ruling of Shulhan Arukh is based on a passage in the Yerushalmi (Gittin 61A). It is important to note that R. Yosef Karo, the author of Shulhan Arukh, writes in his Beit Yosef commentary on the Tur that Jews must show respect to non-Jewish corpses and even escort the body four amot, as is customary regarding Jewish corpses.

⁵ Rambam Sefer HaMitzvot (in discussion about Met Mitzvah) positive commandments #231

Leaving a Dead Body Overnight

Apart from the *mitzvah* to bury a Jewish body, there is also a prohibition of *halanat ha-met*, leaving a body overnight before burial. This law is derived from the same verse as the law regarding burial, which not only requires that the body of the executed sinner be buried, but also that it be removed from the gallows before nightfall.⁶ Immediate burial ensures proper *ka-vod ha-met*, respect for the dead. While attempts are therefore made to bury a body as soon as possible, it is generally accepted that in order to honor the deceased, it is permissible to wait a day in order to make proper funeral arrangements or so that there will be a larger attendance at the funeral.⁷

The timeframe in which one must bury a body has been the subject of much debate. In the 17th and 18th centuries in some Western and Central European countries, it was mandated that corpses be left three days before burial in order to prevent cases of burial prior to complete death. Moses Mendelssohn maintained that since this law did not directly contravene Jewish law or tradition, Jews could abide by this regulation. However, R. Yaakov Emden strongly disagreed on this matter and insisted that it is prohibited to wait such a length of time. Some *Aharonim* have suggested a 24-48 hour period after death as the duration by which one should arrange to bury the deceased.

A number of Midrashic texts provide mystical explanations for the requirement of immediate burial. Most notably, these sources indicate that the soul of a dead person only fully enters heaven upon complete burial and possibly decomposition, and it remains in a state of limbo until that point.¹⁰ For

⁶ Sec Sanhedrin 46b; Tur, Yoreh De'ah 359.

⁷ lbid; See Rambam, *Hilkhot Avel* 12:1. The *Hevra Kadisha* of Jerusalem is stringent on this matter and usually does not allow a corpse to remain unburied overnight.

⁸ See Graetz, Gershichte der Juden, XI:29.

⁹ Sec Noda Be-Yehuda, Yoreh De'ah 211.

¹⁰ Yalkut Shmoni Job 14:22 (See Shabbat 152b for related discussion regarding the deceased's awareness of earthly surroundings until burial)

this reason, *posekim* over the centuries have dealt with the question of whether it is permissible to expedite the decomposition process by using various chemicals. Radbaz ruled that one may use a substance such as quicklime, but he did not advocate the practice.¹¹ R. Yitzhak Elhanan Spektor ruled similarly.¹²

Many sources link the prohibition of halanat ha-met with the *mitzvah* of burial – there is a *mitzvah* to bury a dead body, and that act must be fulfilled without delay.¹³ Accordingly, some suggest that every moment that the body is not buried beyond the first available day for burial constitutes a violation of the prohibition of halanat ha-met. 14 R. Shaul Yisraeli suggests another approach.¹⁵ He notes that in the case of a sinner who is put to death by beit din, there is a mitzvah to ensure that the body does not remain unburied; it thus must be buried on the day of the execution. This is the source that teaches us the general requirement to bury on the first day. However, it is possible that once the first day has passed, the mitzvah of immediate burial is no longer relevant. While there is still a general mitzvah to bury the body, there is no longer an obligation to bury right away and avoid halanat ha-met. According to this view, while proper kavod ha-met demands that a body be buried as soon as possible after death, if there is a factor that overrides kavod ha-met, the prohibition of halanat ha-met may not apply.

Deriving Benefit from a Dead Body

The prohibition of hana'at ha-met, deriving benefit

¹¹ Responsa Radbaz 484.

¹² Ein Yitzhak, Yoreh De'ah 33. This question was posed to R. Spektor (in the early 1900s) by people who wished to employ means of expediting decomposition so that the bodies of their family members would not be unlawfully extracted from the ground for the purposes of study in medical institutes.

¹³ Tosafot, Sanhedrin 46b

¹⁴ Rambam Sanhedrin 15:8

¹⁵ Moreshet Shaul, Parashat Mishpatim.

from a corpse, is the most significant halakhic issue relating to the use of cadavers in anatomy courses. The source of this prohibition is a *gemara* in *Avodah Zarah* that discusses numerous objects from which one may not derive *hana'ah*. The *gemara* derives that a corpse is *assur be-hana'ah* (forbidden for benefit) from a *gezeirat shavah* with *eglah arufah*, which is similarly *asur be-hana'ah*. The *gemara asur be-hana'ah*.

Based on this derivation, most *Rishonim* posit that the prohibition of *hana'at ha-met* only applies to a Jewish corpse, as the compared case of *eglah arufah* is only applicable to Jews. ¹⁸ According to this view, there is no problem entailed in deriving benefit from a non-Jewish cadaver, as in the case, for example, of dissection in a medical school class. Surprisingly, however, *Shulhan Arukh* rules that the prohibition of deriving *hana'ah* applies to gentile corpses as well. ¹⁹ He further asserts that even the shrouds in which a non-Jewish person is buried are subject to this prohibition. The *Peri Tevuah* and R. Yaakov Emden quote this position. ²⁰

What is the basis of *Shulhan Arukh*'s ruling, which contradicts the overwhelming majority of commentaries, who assume that the *issur hana'ah* applies only to Jewish corpses? The Vilna Gaon and Maharsha write that *Shulhan Arukh*'s ruling is based on a cryptic responsum of Rashba, in which he wavers back and forth between prohibiting non-Jewish corpses from *hana'ah* and applying the prohibition only to Jews.²¹ While Rashba initially brings numerous textual and rational proofs as to why the prohibition should only apply to Jewish bodies, he closes the responsum by concluding that the prohibition applies to gentiles as well, without fully explaining his reasoning.

¹⁶ Avoda Zarah 29b.

¹⁷ Eglah Arufah refers to the ceremony performed in a case in which a corpse is discovered and its identity is unknown.

¹⁸ Ritva, Ramban, and Tosafot all seem to subscribe to this view.

¹⁹ Shulhan Arukh, Yoreh De'ah 349.

²⁰ Peri Tevuah 25; She'elat Yavetz 1:41.

²¹ Responsa Rashba 1:365. See also Hiddushei Ha-Rashba, Kiddushin 2, s.v. Ha-Ish Ha-Mikadesh.

It is possible that although the *gemara*'s derivation of the *issur hana'ah* is relevant only to Jewish corpses, the concept of *kavod ha-met* applies to all humans, and that may be at the root of the prohibition of *hana'at ha-met*. Tosafot Yom Tov elaborates on this point at great length, concluding that *kavod ha-met* applies to all humans, as all humans were created *be-tzelem Elokim*, in the image of God.²²

R. Meir Shapiro, Rosh Yeshiva of Yeshivat Chachmei Lublin, notes that the dispute as to whether the *issur handat ha-met* applies to non-Jewish corpses is reflected in the language of the commentaries on the Biblical verse obligating immediate burial. In explaining why it is inappropriate to leave a criminal's body hanging, Rashi writes, "For man was formed in His image, and the people of Israel are His children." Ramban, in contrast, deliberately leaves out the reference to "Israel," describing the person in generic human terms. Based on this, R. Shapiro explains that Rashi maintains that the *mitzvah* of burying the dead (which is linked to the prohibition of deriving benefit from the corpse) is only applicable to Jewish bodies, whereas Ramban assumes that this prohibition applies to all humans.²⁴

Although it is possible to explain the extension of the prohibition of hana'at ha-met to the bodies of non-Jews, since the ruling of Shulhan Arukh appears radical in light of the gemara in Avodah Zarah and the views of the major Rishonim, Pithei Teshuvah claims that Shulhan Arukh must distinguish between Jewish and non-Jewish corpses; there is a biblical prohibition to derive benefit from a Jewish body, whereas there is only a rabbinic prohibition to derive benefit from a non-Jewish corpse. Accordingly, Pithei Teshuvah asserts that while one should not use Jewish cadavers for the sake of study, one may

²² Tosafot Yom Tov, Avot 3:14. See Bereishit 1:27.

²³ Rashi, Devarim 21:23.

²⁴ Responsa Or Ha-Meir 74.

²⁵ Pithei Teshuvah bases this distinction on the language of Shulhan Arukh.

study and dissect non-Jewish bodies in order to obtain medical and scientific information.

The Definition of Hana'ah

One could further question whether the "benefit" derived from the study of cadavers constitutes prohibited hana'ah. If it does not, it would be theoretically possible to study Jewish cadavers as well. This point is subject to debate. Hatam Sofer is of the opinion that hana'ah need not be tangible; any time one acquires knowledge from something, that knowledge is defined as a benefit. Based on this logic, Hatam Sofer explicitly forbids the study of Jewish cadavers. In contrast, Maharam Shick argues that in order for a benefit to constitute halakhic hana'ah, it must have a quantifiable monetary value. Knowledge attained through study of a cadaver is therefore not considered forbidden hana'ah.

Nevertheless, Maharam Shick concludes that it is prohibited to study cadavers because there is, in fact, a monetary benefit to this study. If one were not to study from the corpse, he would have to acquire the knowledge of human anatomy either through purchasing additional textbooks or hiring expert professors.²⁷ It is possible that according to the Maharam Shick, if obtaining a cadaver is actually more expensive than

²⁶ Responsa Hatam Sofer, Yoreh De'ah 336.

²⁷ Responsa Maharam Shick, Yoreh De'ah 344. Maharam Shick bases his position on a gemara in Nedarim (48a) that discusses the case of a man who forbids himself from deriving benefit from a colleague's sefer Torah. The gemara concludes that if this person indeed studies from his friend's Torah scroll, he has transgressed his vow and is held accountable accordingly. Maharam Shick explains that the hana'ah in this context must relate to the monetary benefit of not having to buy another scroll; the knowledge acquired from the study of Torah is a mitzva, and "mitzvot lav lehanot nitnu" — any benefit derived from a mitzvah is not considered halakhic hana'ah (see Rosh Hashana 23). Hatam Sofer would presumably agree that the hana'ah in the case of the Torah scroll is the monetary benefit, but he maintains that in general, knowledge per se can constitute halakhic benefit.

the other available alternatives for learning anatomy, the only benefit derived from study of the cadaver would be knowledge, and this would not violate the *issur hana'ah*.²⁸

Exceptional Cases

Based on the sources that we have seen thus far, we can conclude:

- 1. It is problematic to dissect a Jewish corpse.
- 2. According to *Shulhan Arukh*, it is possibly also problematic to dissect the bodies of gentiles as well.
- 3. Even if we accept that it is forbidden to derive benefit from gentile bodies, there is less of a concern when the study is performed for scientific purposes (in accordance with the *Pithei Teshuvah*).

Nevertheless, there seem to be some exceptions to the first rule. The *posekim* have discussed instances in which it would be permissible to perform an autopsy or some other form of study even on Jewish corpses. Perhaps most notable among these exceptions is a case cited by *Noda Be-Yehuda*.²⁹ A relative of his, a rabbi in London, posed a question regarding the permissibility of a post-mortem autopsy. Surgeons had performed an invasive procedure on a patient in an attempt to remove some sort of kidney stone, and during the surgery, the patient died due to blood loss. Since this illness was common, the doctors wanted to analyze the patient's corpse with the intent of designing a procedure with a smaller incision. After much back and forth arguing both sides, *Noda Be-Yehuda* permits conducting autopsies on Jewish corpses in cases in which

²⁸ See R. J. David Bleich, "Cadavers on Display," *Tradition* 40:1. R. Bleich disagrees with Maharam Shick's assumption that books and teachers are a viable alternative to the study of an actual cadaver. However, as computer generated anatomy imaging becomes more accurate and sophisticated, it may present a viable alternative, and if the cadaver study were to be cheaper, this would present a real violation of deriving monetary benefit.

²⁹ Responsa Noda Be-Yehuda, Mahadura Tanina, Yoreh De'ah 210.

there is potential to help an immediate danger. For instance, if a disease runs in a family and there is reason to believe that an autopsy of a deceased family member may contribute to finding a cure for others with the same ailment, *Noda Be-Yehuda* would permit an autopsy. Hatam Sofer subscribes to this view of limited allowances for autopsies on Jewish cadavers.³⁰

This limited allowance for autopsies, however, does not apply to general scientific study, when there is no immediate danger that will be prevented by the study.

Hazal's Study of Cadavers

Throughout *Shas*, we find many statements of *Hazal* concerning biology, human anatomy, and matters relating to general health and wellbeing. It is clear that *Hazal* engaged in scientific study and considered topics ranging from astronomy to agriculture. In addition to gaining appreciation of God and His creations, the study of science is also crucial for many areas of halakhic decision-making. For example, *Hazal* could not intelligently discuss the declaration of Rosh Chodesh without the pre-requisite knowledge of astronomical movements, and they therefore dedicated much time and effort to this discipline, as recorded in the Talmud. Similarly, in their discussions of matters relating to *tumah* and *taharah*, states of bodily purity, *Hazal* engaged in the study of anatomy. The *mishnayot* go into great detail attempting to delineate the exact number of *eivarim* (limbs) in the human body.³¹

In an attempt to analyze this question, the students of R. Yishmael obtained the corpse of a woman put to death by the Roman courts, and they dissected her body.³² From this Talmudic

³⁰ Hatam Sofer, Yoreh De'ah 336.

³¹ Ohalot 1:8; Makkot 23b. There is much contemporary literature analyzing the numbers recorded by Hazal of 248 parts or joints ("ramah eivarim") and 365 sinews or veins ("shesah giddin"), as these figures seem to conflict with modern scientific findings. See R. Dr. Edward Reichman's essay, "The Anatomy of the Human Body in Rabbinic Literature,"

³² Bekhorot 45a. R. Yishmael's students concluded that the number of

episode, it seems clear that *Hazal* engaged in some form of anatomy dissection. Many assume that the woman in the case of R. Yishmael's students was not Jewish. R. Shlomo Zalman Auerbach brings this case as a proof of the permissibility of performing autopsies on gentiles in certain cases.³³

Some scholars suggest that it is clear from the discussion in the *mishnayot* that *Hazal* performed their own autopsies to obtain this knowledge. From the fact that *Hazal* did not refer to the information on human anatomy as "hokhmat umot ha-olam" (generally accepted secular knowledge), we can deduce that it must be based on their own studies.³⁴ Others claim that only the recorded dissection involving the students of R. Yishmael was performed on a human corpse; all other studies of anatomy were done on animal corpses and the information was then applied to humans.³⁵

Conclusion

It is clear that performing dissections on cadavers is not ideal, and dissection of Jewish corpses may be permitted only in cases in which doing so will have immediate, life-saving benefit. While the issues of *bizayon* to the deceased and deriving benefit from a dead body may pertain to non-Jewish corpses as well, most authorities assume that they primarily relate to Jewish corpses. As a result, it seems appropriate to limit the study of cadavers to non-Jewish bodies if possible. Nonetheless, frivolous dissections of non-Jewish corpses should be avoided. In the context of a medical school anatomy class, many *Aha*-

eivarim totaled 252, and there is much discussion reconciling this with the 248 figure recorded in the mishna.

³³ Recorded in Nishmat Avraham vol 4 Yoreh Deah 349:2 in name of R' S"Z Aurbach

³⁴ Lauterbach, Responsa 82, "Autopsy."

³⁵ See J. Snowman, "A Short History of Talmudic Medicine"

³⁶ Just as Shulhan Arukh rules that burials must be performed on gentiles because of darkei shalom, in the context of anatomy courses, care should be taken not to create a hillul Hashem.

ronim maintain that the scientific benefits of such study outweigh the possible halakhic concerns of dissecting non-Jewish corpses.³⁷

³⁷ Igrot Moshe Yoreh Deah 229, Ibid Hoshen Mishpat 73, Yabia Omer Yoreh Deah 23

RABBI DR. YAAKOV JAFFE

"A Leniency That is Best Left Alone" Signing Documents in Cases of Urgent Medical Need on Shabbat

Shinuy in the Laws of Shabbat

According to Halakha, a person who performs one of the actions forbidden on Shabbat violates a biblical prohibition only if he or she perform the act in the usual manner, and not if he or she does so in an unusual manner. Since violation of the Shabbat in an unusual manner does not constitute a Biblical violation, no Biblical punishment is meted to the violator.

This exemption is noted numerous times in *Massekhet Shabbat*, and it is applied to numerous *melakhot* (forbidden acts). Examples include (but are not limited to): plowing with a chair (46b), harvesting or threshing an item by throwing a projectile at it (73b), selecting one item from among others with one's hands and not through a sieve (74a), grinding an item with a knife (141a), certain methods of cooking oil (according

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to at least one opinion on 40b), combing wool and turning it into thread while it is still attached to the animal, and then shearing it (74b), throwing from one domain to another using the shoulder (153b), carrying rings through the public domain in the hand (62a), carrying in the mouth (102a), carrying in one's shoe (92a), and moving *muktzah* items in an abnormal fashion(50a).

In its many appearances throughout Messekhet Shabbat, this exemption is referred to by multiple names: "Ein derekh" (this is not the matter), "ke-le'achar yad (with the back of the hand), and, in the commentaries, "shinuy" (unusual action). However, the nature of the exemption is the same in all circumstances regardless of the terminology. In all cases, the Talmud concludes that violations of Shabbat are not evaluated merely in terms of whether a particular product has been produced or result has been attained; a full violation also entails a conventional process of producing that product or result. Consequently, violations done in an unusual manner do not constitute complete, Biblical violations of Shabbat.

A somewhat more complex question relates to the status of this unusual action.² Some of the Talmudic discussions treat unusual actions as so different from the prohibitions of Shabbat that they are always permitted, even without any other further reason or argument to allow them to be permitted. However, other discussions give the impression that the unusually performed action might still be prohibited Rabbinically. While one who performs the action in such a manner may be exempt from punishment according to Biblical law, the act still constitutes a Rabbinic violation of Shabbat. The latter perspective makes sense; after all, in the end, the conventional product has been produced, even if the action was undertaken

¹ Regarding whether this exemption applies in realms other than the laws of Shabbat, see *Iglei Tal*, introduction #3.

² This question applies to many possible leniencies on Shabbat, regarding which the authorities struggle to determine if the resulting action is permissible or still prohibited Rabbinically. See Tosafot, *Shabbat* 103a, s.v. lo for a well-known example of this phenomenon.

in a slightly unusual way.

It is also possible that both perspectives are correct: Some significantly unusual actions may be totally permissible, while others entail only an exemption from Biblical punishment. The complex discussion in *Shabbat* 74a (which is understood differently by various commentaries) seems to suggest this middle approach —some unusual acts are always permissible, while others are permissible only under certain circumstances.

The gemara in Pesahim 66b is most explicit in its view that unusual actions are still prohibited Rabbinically, stating "granted that there is no Biblical prohibition, but a Rabbinic prohibition still exists." Interestingly, Rashi writes that although actions performed with a shinuy are still prohibited Rabbinically, the exemption of unusual action is particularly potent, and it thus creates a weaker Rabbinic prohibition than other Rabbinic prohibitions on Shabbat.

The general approach of the later authorities is to treat almost all examples of *shinuy* on Shabbat as Rabbinic prohibitions. This means that nowadays, in most cases, the status of actions performed with a *shinuy* is largely irrelevant, as punishments for Biblical violations of the Shabbat are not meted out in any event and the act remains prohibited Rabbinically. However, the laws of *shinuy* are relevant when dealing with situations of illness on Shabbat.

Shinuy in Cases of Illness

Shulhan Arukh and Rama record two rulings that invoke the leniency of shinuy with regard to treating the ill on Shabbat:

1. If a Jew is significantly ill, but not deathly ill (holeh sheein bo sakanah), it is permissible to perform a Rabbinic violation on his or her behalf as long as it is performed with a shinuy. Put differently, violations for non-dying ill patients are only permissible if three factors are present: (a) significant (though not life-threatening) illness,

- (b) Rabbinic violation, (c) performed in an unusual manner.³
- 2. Although one may violate any law of Shabbat in order to save someone who is deathly ill (holeh she-yesh bo sakanah), one should ideally use a shinuy if doing so will not cause delay in the care of the sick individual.⁴ This is done to minimize the damage done to Shabbat, even when Shabbat may be violated.

The first position is readily understandable. Essentially, a violation performed in an unusual manner is a lesser violation, which when combined with other factors may become permissible on Shabbat. When a Rabbinic violation is lowered to an even lesser status by performance in an unusual way, the resultant prohibition is sufficiently small that the counterpressure of aiding the sick is sufficient to permit the action on Shabbat. Moreover, the *gemara* in *Yevamot* rules that the combination of (a) great pain, (b) non-capital Biblical violation (i.e., violation on Yom Tov), and (c) performance in an unusual manner are sufficient to permit the violation of Shabbat. This goes one step beyond the ruling in *Shulhan Arukh*, since it allows the violation of a non-capital Biblical violation and not only a Rabbinic one.

The second invocation of *shinuy*, in a case of someone who is deathly ill, requires somewhat greater elaboration. To understand this question, we will need to consider both a conceptual question, and then also consider a question of how to interpret a section of the Talmud.

The Talmud rules that in the case of danger to human life (pikuah nefesh), Shabbat can be violated, and there is little equivocation on this point. The Rishonim debate how

³ Shulhan Arukh 328:17 This position is called the "third view" among the positions of the earlier authorities.

⁴ Rama, Orah Hayim 328:12.

⁵ Yevamot 114a.

⁶ Yoma 83a and 84b. This ruling is issued by R. Mattia Ben Heresh, the leader of the Jewish community of Rome in the period shortly following

to understand the nature of the permission to violate Shabbat conceptually: Is Shabbat entirely suspended on account of the need to preserve life (in Rabbinic terminology, "hutra" or "lo nesra"), or is Shabbat merely artificially pushed aside, such that the forbidden action has become permissible in order to save a life (in Rabbinic terminology, "dehuya")? As a follow-up question, to what extent does the permission in cases of pikuah nefesh carry with it a requirement to minimize the violation as much as possible, and to what extent is the permission complete, with no need to pursue the absolute minimum violation? This question is more acute for those who maintain that Shabbat is dehuya in cases of pikuah nefesh, but it can also be asked according to the first view.

Rambam writes that Shabbat is not suspended in the case of the deathly ill, but rather pushed aside. Nevertheless, there is no need to minimize the violation to the absolute minimum. Consequently, in cases of *pikuah nefesh*, one does not ask a gentile or child to perform the violation if an adult is available. In contrast, Yitzchak of Vienna presents an argument (in his code *Or Zarua*') that it is preferable to ask a gentile to violate the Shabbat whenever possible, even in cases of

the destruction of the Temple (see Yoma 53b, Me'ilah 17a, Sanhedrin 32b [but cf. Margoliot Ha-Yam ad loc.], and Avot 4:15). R. Mattia ben Heresh issued few halakhic rulings (and may be best known for his aggadic ruling cited by Rashi, Shemot 12:6), and two of them found in Yoma are medical in nature. Interestingly, Mattia's Greek name would have been Theodorus, the name of a contemporary Roman Jewish doctor (see Nazir 52a, Bekhorot 28b, Pesahim 53a).

⁷ The gemara in Menahot (64a) establishes that in some circumstances, we are required to minimize the nature of the violation, but we must still ask to what extent violations must be minimized.

⁸ Hilkhot Shabbat 2:1.

⁹ Ibid. 2:3. A gentile or child is not asked because doing so makes Shabbat appear to have lesser seriousness. This reason only makes sense if Rambam maintains that there is no need to minimize the level of the violation; if there were such a requirement, this concern would not be relevant.

pikuah nefesh, in order to minimize the violation. ¹⁰ In the end, however, Or Zarua' fundamentally agrees with Rambam that "it is like a weekday for all matters that are needed" and consequently that it might not be of absolute necessity to minimize each and every violation; one need not ask a gentile or child.

Or Zarua` then cites the gemara in Shabbat 128b, which discusses the case of a woman in childbirth and where the gemara advocates using a shinuy on Shabbat, even when caring for the deathly ill. Though the woman giving birth is in grave danger, the Talmud rules that "however much we can do in an unusual way, we do unusually," and recommends that oil not be transported using a vessel to aid in the birthing process;

10 Or Zarua', Shabbat 2:38, Or Zarua' addresses the question of extinguishing building fires on Shabbat. A parallel discussion in Or Zarua` (Sanhedrin 3:24) indicates that that the original justification for extinguishing fires on Shabbat, which ostensibly preceded him, was grounded on a doctrine of "indulgences;" after one extinguished a fire on Shabbat, one could undertake a fast or give charity in order to expiate the sin. Given that indulgences were a major issue in Germany during Or Zarua"s time (the Fourth Lateran Council, issued in his lifetime, addressed abuses of indulgences among non-Jewish residents of the Holy Roman Empire), one imagines that the idea of putting out fires on Shabbat and paying the indulgence afterward began without Rabbinic acquiescence and without Talmudic basis, but rather came from the population, who invoked a doctrine they saw in the surrounding culture and applied it to their own. It was difficult to avoid the urge to extinguish fires on Shabbat, and later justification needed to be found - in this case, one not based on the Talmud. (The one Talmudic source cited for this concept of indulgences, Sanhedrin 26b, cannot be the source of the practice since the penalty in that context is excommunication, not charity, and the gemara attributes the notion to erroneous grave-diggers; it is never granted the status of normative Jewish law.)

In response, Or Zarua permits the practice of extinguishing fires, but with new justification. Since failure to extinguish a fire would likely incite a pogrom against the Jews in the new urbanized cities (a growing phenomenon in Germany around that time, along with the ritual murder charge which also had begun picking up steam by the 13th century), one is permitted to extinguish a fire on Shabbat in the Diaspora in order to avoid future loss of Jewish life – not from the fire per se, but from the resulting pogrom.

rather it is brought in an unusual manner. Or Zarua' concludes that if possible, this principle should be extended to all cases of illness on Shabbat. Thus, shinuy is strongly advocated whenever possible, although not required. It is the view of the Or Zarua' which became the basis for the ruling that shinuy should be used whenever possible, even when caring for the deathly ill. This position, although based to some degree on the gemara in Shabbat, may also be intuitive and logically reasonable even without a source. Given that it is still Shabbat and there are still ways to minimize the violation, why would we not want to do so? Why would any Shabbat fearing Jew be reluctant to minimize the violation to Shabbat? At the same time, we must note that Rambam, in contrast, rules that the gemara's discussion pertains only to a woman in childbirth; use of a shinuy is preferred only in that case. 12

As we have seen, use of a shinuy is required when per-

¹¹ This position is reiterated in *Or Zarua*, *Shabbat* 108 (Laws of Childbirth on Shabbat, end of subsection 1). The position of *Or Zarua* is complex because it strongly advocates for, without actually requiring, the use of *shinuy*, but still advocates against using children and gentiles even when doing so would not cause any delay. Thus, sometimes the violation is minimized, while sometimes it is not. Rama (328:12) avoids the complicated distinctions needed to maintain this middle ground by always requiring minimization of the violation. Ramban issues a similar ruling to that of *Or Zarua* in *Torah Ha-Adam* (*Sakanah*, p. 30) based on the same *gemara* in *Shabbat*. However, as is usually the case, Rama bases his position on the Rabbis of the Ashkenazic tradition, and not on Ramban, from the tradition of Christian Spain.

¹² Hilkhot Shabbat 2:11. Why should childbirth be different than other cases of life-threatening illness? The case of permitting Shabbat desecration on behalf of a woman in labor is one of the most complex questions among the halakhot of caring for the ill because it is difficult to argue that all of the steps taken on behalf of a birthing woman are needed to save lives, leading to major questions as to why we intuit that certain actions are permissible without real evidence that the save lives. For a recent discussion of the problem, see Lokshin and Winberg, "Maternal Birthing," Hakira 16 (2013), and the exchange that followed in the letters to the editor in Hakira 18. In practice, use of shinuy is generally recommended by most authorities when caring for the ill on Shabbat, and by virtually all authorities in cases of childbirth on Shabbat.

forming Rabbinically prohibited activities for the sake of a holeh she-ein bo sakanah on Shabbat; it is recommended even when acting for the sake of a holeh she-yesh bo sakanah, and at the very least for the sake of a woman in childbirth. Accordingly, although the precise definition of a shinuy is not relevant for much of hilkhot Shabbat, it is particularly important when it comes to the treatment of the ill on Shabbat. One particular situation in which the use of shinuy may be particularly relevant in modern times is the case of childbirth. Many melakhot will likely be violated over the course of the care of this woman -from calling the doctor to traveling to the hospital and signing paperwork - and any way in which the melakhot can be done using a shinuy would obviously be recommended. Since the laws of shinuy vary from melakhah to melakhah, great care must be taken to study the laws of shinuy as they apply to each situation.

Unusual Forms of Writing

The *melakha* of *kotev*, writing, is not generally directly required in order to save a life, but it may be a necessary part of the process in modern medical settings, with their attendant paperwork and required signatures. If the situation demands it, how can a *shinuy* be employed in such a case?

Perhaps more than any other action undertaken by a human being, a tremendous level of manual dexterity is necessary to produce legible writing. While some acts may be performed conventionally with either the dominant or non-dominant hand, writing is generally only performed by the dominant hand. Accordingly, the *gemara* in *Shabbat* 103a explicitly states that a right-handed individual is only culpable for writing on Shabbat if he or she writes with his right hand and a left-handed individual is only culpable if he or she writes with his left hand; only an ambidextrous individual can be found guilty

for writing with either hand.¹³ The leniency of using the non-dominant hand only applies to the *melakha* of writing, but not to any other forbidden act on Shabbat.¹⁴

The gemara suggests that according to the opinion of R. Yossi, one can be held guilty even for writing with the non-dominant hand because one violates Shabbat even for "marking," an act that requires somewhat less dexterity than "writing." R. Yossi seems to have an entirely different conception of the melakhah of kotev, and he is therefore more expansive as to how the melakhah is violated. The impression from both the gemara and Rambam¹⁵ is that R. Yossi's view is rejected. Thus, writing with the non-dominant hand is considered a shinuy on Shabbat. It goes without saying that writing with the pen in the mouth, elbow, or any other body part is also considered an unusual method of writing. Marking, the rough and non-detailed production of pictures or signs is, at most, a toladah of the melakhah of writing, although it is possible that it may be permissible in the entirety. 16

For this reason, the *posekim* recommend that if someone is in the hospital and must sign a document in order for physicians to embark on a necessary treatment on Shabbat, the signature should be provided using the left hand.¹⁷

R. Moshe Feinstein writes that certain unusual methods of producing written text would require a greater shinuy

¹³ In this context, ambidextrous probably means someone who writes with both hands. It is questionable whether someone who considers one hand his dominant one but generally writes only with the other hand would be able to write with the dominant, non-writing hand and consider that a *shinuy* on Shabbat.

¹⁴ Havyei Adam 9:2.

¹⁵ Hilkhot Shabbat 11:14.

¹⁶ Rambam, *Hilkhot Shabbat* 11:17 (and *Maggid Mishnah* ad loc.) and *Arukh Ha-Shulhan* (340:19) write that this rough and non-detailed marking is prohibited, but as a *toladah* or extension of writing. (See, however, *Be'er Halacha* 240:5.)

¹⁷ See Bodner and Roth, Halachos of Refuah on Shabbat (Feldheim, 2008), 94, 344; Shemirat Shabbat Ke-Hilkhatah 32:49.

than just use of the left hand. 18 The identification of the type of shinuy is not made regarding the entire melakhah as a whole category, but rather on the level of the discrete action at hand. The use of the left hand constitutes a shinuy only when written text is produced by hand. However, if someone produces writing using another matter (such as by running ink over raised letters onto a paper), even though the melakhah is still writing, the use of the left hand no longer functions as a shinuy for this sub-type of writing, use of the left hand would not be unusual. Typing using the left hand would similarly not constitute a shinuy; even though the category of melakhah allows for a left-hand shinuy, this particular application clearly does not constitute an unusual act, even when the non-dominant hand is used.

In any event, R. Feinstein still maintains that use of the left hand remains a certified *shinuy* for writing on Shabbat, and he thus permits a doctor to use his left hand if necessary, following the rules of caring for the sick and/or dying on Shabbat. Based on this responsum, it would seem that all examples of writing, when medically necessary, such as if a physician refuses to provide treatment without the patient's signature could be signed using the left hand on Shabbat, for the same reason.

Using the Mouth to Sign Documentation

A friend of mine recently recounted that when his wife was discharged from the hospital following delivery, he was instructed by a rabbi in the community to sign the documentation with his mouth and not with his left hand. This instruction seems surprising. If the use of the left hand constitutes a *shinuy*, using the mouth instead fails to add any grounds for leniency beyond being just another example of *shinuy*. ¹⁹ Conversely, if

¹⁸ Iggerot Moshe, Even Ha-Ezer 4:73:4.

¹⁹ While some very unusual methods of writing might be totally permissible on Shabbat, no authorities suggest that signing with the mouth is

one maintains that signing certain medical paperwork is totally unnecessary and unwarranted on Shabbat and is therefore not covered under the license to care for the deathly ill (or that oral instructions must be given on Shabbat instead of signing), then use of any *shinuy* – even writing with one's mouth – would be insufficient.

An argument to require signing papers with one's mouth can only be constructed based on three assumptions:

- (a) Signing should be understood as "marking" and not as "writing," and using the left hand is therefore an insufficient shinuy. This is a difficult assumption; after all, a signature consists of letters and not just pictures, and is always performed with the dominant hand. Marking, on the other hand, is conventionally done by most individuals using either hand. One who is stringent would need to argue that since today many signatures are illegible, they are considered marking and not writing, but still would need to contend with the fact that almost all people sign with the dominant hand.
- (b) The Rabbis who disagree with R. Yossi and consider use of the non-dominant hand a *shinuy* when "writing," agree with R. Yossi that use of a non-dominant hand is <u>not</u> a *shinuy* when "marking." This question is subject to debate among the later authorities. Some argue that all agree that marking with the non-dominant hand is a Biblical violation and the dispensation of *shinuy* does not apply. Others, however, argue that it is only a Rabbinic violation, as the rules regarding the *toldadah* of writing are the same as for writing itself, and use of left hand remains a *shinuy* to the rabbis, even in regard to writing. ²¹

To frame the same issue slightly differently: Eglei Tal is of the view that shinuy can operate in one of two ways: either

totally permissible and signing with the left hand is Rabbinically prohibited. The impression is clearly that both the mouth and left-hand should be considered equal; writing with either would constitute violation of a Rabbinic prohibition.

²⁰ Implication of Avnei Nezer 209:9; Shevet Ha-Levi 1:114.

²¹ Minhas Hinukh, Mosakh Ha-Shabbat, end of Kotev). Others are unsure; see Ohr Same 'ach 11:17.

the *method* of action is different from the usual or the resultant product is different.²² In most writing, use of the left hand involves a change both to the process (which hand is used) and the product (the written text), and it should thus certainly qualify as a *shinuy*. However, one seeking to be stringent would argue that in the case of a signature, which might be illegible when executed with the right hand as well, using the left hand would not constitute a *shinuy* if the resultant signature is essentially of a similar level of readability.

(c) That we are sufficiently confident about both of these assumptions that we are willing to impose them even in a case of caring for the ill, when the very requirement for unusual action was tentative.

The overwhelming consensus among the authorities is that any time a person writes letters on Shabbat, use of the non-dominant hand constitutes a *shinuy* when necessary for medical purposes. Although some may try to construct an argument to prohibit this practice, the preponderance of the evidence supports the lenient conclusion in this case. The stringency is built upon three assumptions, and most authorities today take issue with at least one, if not all three, of those assumptions, and they therefore permit the use of the left hand to sign medically required paperwork on Shabbat.

RABBI EPHRAIM METH

Danger! Birkat haGomel Ahead!

Adam was driving on the interstate in the center lane. Traffic was light, but to bypass the slow car in front of him, he decided to switch to the left lane. As he began to turn his steering wheel, he had an awful premonition. Whipping his head around, he double checked his blind spot, where, to his horror, he saw a massive tractor trailer barreling towards him. Adam jerked his wheel, and made it back to the center lane moments before the truck passed through the space where his car would have been.

Upon arriving safely, Adam asked his rabbi whether he needed to recite birkat haGomel for his miraculous rescue. The rabbi replied with a parable. "Once, my wife hung my pajamas to dry on the clothesline that stretched from our sixth-story apartment to the neighboring sixth-story apartment. It was a windy day, and the wind blew my pajamas off the line, from whence they fell six stories to the ground. Had I been in my pajamas at the time," the rabbi quipped, "I would not have survived the fall. Yet I was not in my pajamas, so I do not recite haGomel. Similarly," concluded the rabbi, "since you were not actually in the truck's lane, you do not need to recite haGomel."

I heard this story many years ago, and I have always

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since relished retelling it. Recently, however, I have come to disagree with the storied rabbi's conclusion, and this article will attempt to explain why. As Rabbi Yehudah Turetsky, in an earlier volume of this journal, has masterfully addressed many of the technical issues that relate to birkat haGomel, I will confine myself in this article mostly to thematic matters. Nonetheless, I trust that the present article will grant recovered patients an added measure of clarity about the meaning of birkat haGomel and the parameters of when it should be said.

It is my contention in this article that birkat haGomel is recited whenever one legitimately experiences certain instinctive feelings, including relief, gratitude to God, awareness of dependence upon God, awareness of God's involvement with seemingly natural processes, etc. Obviously, paranoiacs who experience these feelings with minimal stimulus cannot be considered to experience them legitimately. Hence, the Shulchan Aruch (219) writes that one who had a headache, but whose normal functioning was not impaired, may not recite haGomel upon recovery even if he has the aforementioned feelings. Similarly, one who has most of these feelings on account of a miracle that harmed him (i.e. a freak accident) would not recite haGomel because he lacks the requisite gratitude. Nonetheless, experiencing actual danger is not a necessary condition for haGomel, so long as these instinctive feelings are legitimately present.

SheAsah Nissim and haGomel

The Talmud (Berachot 54a) discusses a special berachah, to be recited when one passes the place where a miracle occurred to him or to his ancestors: she'asah li neis/nissim baMakom haZeh, or sheAsah neis/nissim leAvi/leImi baMakom haZeh. Rishonim (see Abudarham on Birkot Re'iyah, Shevach, veHoda'ah; Shut Rivash 337; Machatzit haShekel OC 218) ask: in what way does this berachah differ from birkat haGomel? Two theories are advanced. First, haGomel is recited on the experience of a miracle, while sheAsah nissim is recit-

ed on the memory of a miracle. If this theory is correct, one should never recite sheAsah nissim in the immediate wake of a miracle, but rather, one should wait until the experience is only a memory, brought to mind by passing the place where the miracle occurred, before reciting sheAsah nissim. Moreover, every instance that requires ha Gomel should also require sheAsah nissim, and vice versa. For example, just as one recites haGomel after having a child or recovering from surgery, one should recite sheAsah nissim when he or she passes the hospital where they were born or where they delivered or where they underwent successful surgery. The Vilna Gaon (OC 218) thinks it ludicrous that one would recite a sheAsah nissim each time he or she passes the place he was born. Those authorities who take this position, however, would consider the possibility less than ludicrous, or, at least, would assert that childbirth, being commonplace, warrants neither a haGomel nor a sheAsah nissim.

The second theory about the difference between haGomel and sheAsah nissim is that sheAsah nissim is only recited on supernatural salvations, while haGomel is only recited on natural salvations. Hence, one who experienced a miraculous salvation would recite sheAsah nissim, but not haGomel, while one who experienced a natural salvation would recite haGomel, but not she'eAsah nissim. Furthermore, according to this theory, just as haGomel is recited in the immediate aftermath of a natural salvation, sheAsah nissim would be recited in the immediate aftermath of a miraculous salvation, not just when one returns to the spot after the experience metamorphoses into memory. Practically, we accept this second theory, with one caveat. Although sheAsah nissim is recited immediately, and although natural salvations do not receive a sheAsah nissim, nonetheless, miraculous salvations receive, in addition to sheAsah nissim, birkat haGomel as well.

The aforementioned halakhah forces us to establish a threshold between natural and supernatural salvations. What should this threshold be? My father-in-law, Dr. Peter Tuckel,

suggested that any event whose occurrence cannot be explained in retrospect is a miracle, while an event whose occurrence can be explained is considered natural. Dr. Harvey Risch notes that according to this, as scientific understanding progresses, the number of events halakhically defined as miracles decreases. Dr. Risch suggests an alternate criterion, namely, that a salvation with a low probability of occurring is, if it occurs, miraculous, while an event whose probability is high, if it occurs, is considered natural. If a patient underwent tests that indicated with high likelihood he had a serious disease, but then underwent other tests that contraindicated the first, according to Dr. Tuckel, he would not recite sheAsah nissim, while according to Dr. Risch, he would. One way or another, the silence of classical sources on this subject should be kept in mind as our discussion proceeds.

HaGomel in Tehillim and in the Talmud

Rabbeinu Yonah (Berachot, 54b) notes a fascinating discrepancy between the book of Tehillim (ch. 107) and the Talmud. Both books list four categories of people who should or who must bring a Todah offering. However, while the book of Tehillim lists them in the following order - seafarers, prisoners, invalids, and caravaniers, the Talmud lists them in a different order - seafarers, caravaniers, invalids, and prisoners. Rabbeinu Yonah explains that the Talmud listed the four in order of greatest danger to least danger, while the book of Tehillim lists them in order of most commonly occurring to least commonly occurring. This explanation provokes the following question: the Talmud's criterion makes sense, as birkat haGomel is dependent on danger, but why did the book of Tehillim not adopt a similar criterion? The book of Tehillim may be teaching us that danger is not as integral to birkat haGomel as we might have thought, a possibility that the next segments of our discussion will elaborate upon.

Earthquakes and Mad Bulls

Under what circumstances is birkat haGomel recited? Some Rishonim (see Rivash, ibid. and Beit Yosef OC 219) believe that it is only recited in the four circumstances King David enumerated in the book of Tehillim. These Rishonim believe that haGomel replaces a Todah offering, and should only be recited in circumstances when one would have brought that offering. They assume that the Todah was only obligatory in these four circumstances, an assumption that lacks evidence. Regardless, though, of whether the Todah can serve as evidence, these Rishonim can certainly appeal to the book of Tehillim, which only enumerates these four circumstances.

Rivash, responding to these Rishonim, argues that the four cases discussed in Tehillim are archetypes. Those cases represent the typical cases when one is wont to encounter danger. However, one who survives the collapse of a building or one who faced an angry bull and lived must also recite haGomel. In light of the Rivash's response, the following question arises: although the other Rishonim appeal to a narrow reading of the book of Tehillim, what *logic* underlies their argument to restrict recitation of birkat haGomel? Logically, what differentiates seafarers, prisoners, invalids, and caravaniers from all other people who face danger and survive?

Tefillat haDerech and haGomel

The Yerushalmi (Berachot 4,5) writes that "all roads are presumed dangerous." The Yerushalmi clarifies its intent, and writes that before departing on a journey, one should ensure that his or her papers (i.e. last will and testament) are in order. However, many poskim (see Beit Yosef, ibid. and Vilna Gaon OC 219) assume that the Yerushalmi also refers to tefillat haDerech, and that the Yerushalmi means to communicate that the experience of long-distance travel should inspire trepidation within us, and that trepidation should be expressed in a plea to Hashem for safety. Finally, some authorities take the Yerushalmi even further, and argue that it refers to birkat haGomel. In

other words, the Yerushalmi requires a birkat haGomel in the wake of any journey that requires tefillat haDerech, or at least, in the wake of any significant long-distance journey.

These authorities adduce proof for their position from a parallel statement of the Yerushalmi, "all invalids are presumed to be in danger." They assume the Yerushalmi's second statement cannot intend to advise only invalids to put their papers in order. They also assume that it cannot be advising invalids to pray with extra fervor for recovery even if their situation does not seem serious, since no statutory prayer parallel to tefillat haDerech exists for invalids. Therefore, they conclude, the Yerushalmi must be referring to birkat haGomel, mandating birkat haGomel for patients who recover from any illness, not just from illnesses that doctors diagnose as life-threatening, since "all invalids are presumed to be in danger." Most poskim affirm the fact that even non-life-threatening illnesses and non-life-threatening long-distance journeys still require a birkat haGomel.

Along similar lines, the Rashba (Shut haRashba 1,82) was queried about whether or not a patient who suffers from chronic illness should recite birkat haGomel each time his symptoms disappear. The precise situation to which the Rashba refers is unclear. Is it a cancer patient whose illness was beaten into remission again and again? Is it someone who suffers from chronic debilitating ear infections? The Rashba challenged his questioner's implied empirical assumption, that each time a recovery occurs, it is added to the list of "instances where these particular symptoms were not fatal," thereby lowering the overall likelihood that a patient would die from these symptoms or from the disease that gives them rise. Rather, writes the Rashba, we should view the multiple recoveries as recurrent miracles, and therefore, each time a recovery occurs birkat haGomel should be recited. If the Rashba is referring to an illness like cancer, we can easily understand his reasoning. Each time the disease is beaten into remission is a miracle, regardless of how many earlier times the phenomenon occurred. If, however, the Rashba also refers to chronic ear infections, then he is significantly lowering the bar for what type of recovery counts as a miracle.

HaGomel as Gratitude for Providence

R. Moshe Chaim Luzzatto, in his sefer Derech Hashem, writes that God guides the world at two levels. The first level, providence, is unpredictable, and depends on personal merit and on man's relationship with God. The second level, nature, is deterministic, predictable, and applies equally to all things, whether or not they are connected personally with God. When one recovers from an illness, or when one experiences an uneventful long-distance trip, it is possible that the laws of nature themselves provided for his safety. But it is also possible that the laws of nature would have demanded a different outcome, and that God Himself intervened, suspending nature and replacing it with providence. The Turei Zahav (OC 219) writes that Birkat haGomel is meant to sensitize us to that possibility. It is not a certainty that we experienced providence, but it is a distinct possibility, and that possibility demands an expression of gratitude.

Similarly, R. Shlomo Wolbe (Alei Shur, vol. 2, pp. 494-7) writes that danger exists to inspire us with awe of God. The trepidation we once would feel upon embarking on a long-distance journey, that we still sometimes feel upon preparing for surgery even if that surgery is determined safe by science, is a gift from God to inspire us to feel in awe of Him. Our trepidation is not always rational; indeed, it is sometimes far from it. Evolutionary psychologists have noted that even urbanites instinctively fear snakes more than cars, despite the fact that cars pose for them a far more serious danger. People are instinctively more afraid of air travel than of automobile travel, even though motorists suffer more fatalities than fliers. Torah keeps us in tune with our natural instincts, and it keeps our natural instincts in tune. We should experience trepidation on a long-distance journey, and we should experience trepidation before

even minor surgery. "All roads are presumed dangerous, and all invalids are presumed to be in danger." The trepidation should lead us to pour out our hearts in prayer, as in tefillat haDerech, and it should lead us to express thanksgiving when it passes, as in birkat haGomel. All of nature is a miracle, but sometimes God strips it of its veil, and asks us to express our wonder at His power and His compassion.

Hence, the opinion that birkat haGomel and sheAsah nissim overlap, as well as the silence of classical sources regarding the threshold between natural and supernatural salvation. For who wants to cover the grandeur of providence revealed?

Hence, furthermore, the possibility that birkat haGomel is restricted to four very specific circumstances. The whole institution of birkat haGomel is counterintuitive; most concealed miracles do not require a berachah, and why should these, just because they engender trepidation, be any different? Given birkat haGomel's counterintuitive nature, we perhaps should restrict its recitation to the circumstances enumerated by King David with divine inspiration.

This brings us to King David's avoidance of ordering the four cases when haGomel is recited from most dangerous to least dangerous. The emphasis on danger might have suggested that haGomel has something to do with empiricism, that it is a cold and calculated response to particular probabilities and percentages. Now, however, King David emphasizes that haGomel is a response not to danger, but to the feeling of danger; it follows not in the wake of a threat to life, but rather in the wake of a renewed appreciation of life's preciousness.

In light of this, we can also easily understand why we recite haGomel even after safe long-distance voyages and even after perfectly safe surgeries. There is a loose parallel between haGomel and tefillat haDerech. Whenever we travel and experience legitimate trepidation, we pray tefillat haDerech. And whenever we are relieved of such trepidation, if the trepidation had reached a certain crescendo, we recite haGomel. And, moreover, we can understand why each recovery from a chron-

ic illness, even a common one, should be viewed as a discrete miracle. Each recovery is part of the miracle of nature, but the illness's debilitating nature softens us and sensitizes us to just how miraculous it is.

Conclusion

Now we are in a position to understand the difference between the driver saved from a barreling tractor-trailer and the rabbi who was "saved" from falling six stories in his pajamas. The rabbi was not in danger, was not exposed to danger, and was not conscious of having been saved from danger. His pajamas landing did not leave him with a heightened awareness of how God protects him. The driver, however, exposed himself to danger, consciously felt an encounter with danger, and was left with a heightened awareness of God's protection. As the Rivash (ibid.) writes, if one encounters danger on a short journey, even if he is saved "naturally," he should recite birkat haGomel. More than any technical combination of circumstances or statistics, it is the legitimate trepidation and relief we experience that enables and obligates us to recite birkat haGomel.

RABBI DR. YISRAEL KATZ

Menstrual Regulation for the Jewish Bride

Introduction

According to the Jewish law and custom, a woman during her time of menstruation is considered "niddah." During this time, she and her husband are forbidden to have any physical contact. In addition, several measures are enacted to ensure that they do not come into physical contact due to error or unbridled passion. In order to be allowed to resume contact with her husband following the completion of menstruation, a woman must undergo a series of vaginal self-examinations with a clean cloth. After seven days of such examinations, she immerses in a ritual bath (mikveh), at which point contact between her and her husband is permitted.¹

The requirement of ritual immersion in a *mikveh* prior to physical contact also applies to a bride and groom at the time of their wedding. Complications thus arise in a case in which the bride has not completed her menstrual cycle in its entirety and thus is not able to undergo ritual immersion before her wedding. This situation is called "*hupat niddah*," and all physical contact is forbidden between the bride and her husband until this ritual immersion has taken place.

It not always easy to predict when a woman's periodic

1 Shulhan Arukh 183-199.

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bleeding will occur, and there are often other considerations which prevent the wedding from coinciding with the desired time during a woman's natural menstrual cycle. As a result, many Orthodox Jewish brides seek medical consultation in order to time their cycle around their wedding. This goal can usually be achieved by careful planning or through hormonal methods, and it is therefore of important relevance to medical professionals involved in gynecology and family planning.

While there is limited attention to the subject in the academic literature, several suggestions how to deal with this issue have been proposed. One group of gynecologists suggests two options of management.² One option is to use norethisterone acetate, progesterone that prolongs the luteal phase and helps to time menstruation. The other option is to use combined oral contraceptives to determine when the bleeding will occur.³ Baron and his group suggest that the bride stop taking oral contraceptive pills 21 days before the wedding for a period of 7 days and then continue taking the pills until the wedding. Halperin suggests a modification to this method, recommending that the bride stop the pills 21 days before the wedding and not renew them.⁴

A group of American physicians described their experience with norethindrone for this purpose. The bride received norethindrone TID from day 12 of the last cycle before the wedding until the wedding. The results were good. All the brides were "clean" on their wedding night. The authors sug-

² E. Baron, C. Katan, D. Zimmerman, "When is Hormonal Intervention Justified In Order to Prevent *Hupat Niddah*?," *ASSIA* (2007): 96-106.

³ Every bride who receives hormonal therapy should undergo the usual medical evaluation before getting oral contraceptives; see World Health Organization, "Medical Eligibility Criteria for Contraceptive Use" (2009), available at http://whqlibdoc.who.int/publications/2010/9789241563888_eng.pdf?ua=1 (accessed Oct. 26, 2014).

⁴ M. Halperin, "Oral Contraceptives for Preventing Hupat Niddah," Schlesinger Institute International Responsa Project, available at http://98.131.138.124/db/showQ.asp? ID=2618 (accessed Oct. 23, 2014). 5 "Norethindrone for the Jewish Bride" Dr. Martin M Grajower, Rabbi Mordechai Willig, & Dr Richard Grazi

gest that this is the main treatment for the Jewish bride, but as I found in my survey, there are different scenarios when other options may be appropriate.

This hormonal treatment was not evaluated through planned research, as planning such a study poses many ethical and practical problems. It would be difficult to get informed consent of the brides for different kinds of hormonal manipulation and even for an interview about this intimate subject. It would also be difficult to get approval from the Helsinki committee for giving medication for religious problems.⁶ In this study, we explored how physicians with experience in this area prescribe various treatment regimens to manage the problem. Based on their responses, we have developed a protocol to help the physician who is not familiar with this problem to understand the basic forms of treatment that can be offered to the Jewish bride.

Methods

Study Population

Family physicians were recruited for study participation from a research network of family physicians in Israel. In addition, we recruited gynecologists who work in consultation centers for Jewish women. Experienced physicians were identified by their publications, by bridal training organizations, and by a preliminary survey on the "Rambam" research network.

Study Procedure

⁶ An example for this problem can be demonstrated in the debate about hormonal manipulation for women who can not conceive because their ovulation occurs before they go to the Mikvch. http://toravoda.org.il/%D7%9B%D7%AA%D7%91%D7%94/%D7%94%D7%94%D7%94%D7%99%D7%90%D7%9B%D7%98%D7%94-%D7%95%D7%94%D7%95%D7%90%D7%90%D7%93%D7%94-%D7%93%D7%A0%D7%99%D7%90%D7%90%D7%90%D7%90%D7%90%D7%90%D7%90%D7%A0

A specialized survey questionnaire was formulated including the most common clinical scenarios. Two options were omitted due to their high chances of failure. The first is the provision of combined OCP when the wedding date is close. Many women will experience a small amount of bleeding when they start taking OCP pills. For the Jewish bride, even a minimal amount of "spotting" is unacceptable in order to enable physical contact. The second option omitted is the use of OCP pills continuously, which also has a relatively high possibility of minimal bleeding. 8

Questionnaires were completed anonymously. The questionnaire is attached as an appendix.

Statistical Analysis

Differences between the responses of family physicians and gynecologists were analyzed. SPSS software was used for chi square test analysis to test for any differences between physicians from the various disciplines.

Results

Study Sample

Fifty physicians with experience in the field were recruited and voluntarily agreed to complete the survey. Answers were received from 15 family physicians out of 25 who received the questionnaire. In addition, responses from 13 gynecologists were obtained out of 25 who agreed to participate. Since there was no statistical difference between family physicians and gynecologists with respect to survey responses, results are presented without specifying in every question if there is a difference between physicians of different disciplines. Several physicians

⁷ I.H. Thorneycroft, "Cycle Control with Oral Contraceptives: A Review of the Literature," Am J Obstet Gynecol 180 (1999): 280-87.

⁸ L. Miller, J.P. Hughes, "Continuous Combination Oral Contraceptive Pills to Eliminate Withdrawal Bleeding: A Randomized Trial," *Obstet Gynecol* 101:4 (2003): 653.

chose not to answer some of the questions and some of them added their own explanations.

Survey Responses

Responses were varied (see Table 1). In summary, when the wedding date is prior to or during the upcoming menstruation, the recommended management is progesterone administration. If the wedding is in the third week after the menstrual period, most physicians (55%) will not offer treatment. However, if it is expected in the fourth week after menstruation, the risks of bleeding increases and most physicians will offer progesterone (86%). Most physicians will commence this treatment a week before the wedding (62%). Most physicians explained that they calculate the time to start the treatment according to the expected time of menstruation and not according to the wedding date. If the wedding date is set when menstruation is expected, most physicians believe that the period can be delayed by using progesterone for at least a week (71%).

Timing the period for a Jewish bride (1)

What is the wedding date and when is the next bleeding expected?

Wedding date before or during the next bleeding.



- 1.Wedding in the 3rd week after bleeding no treatment
- 2.Wedding in the fourth week treat with progesterone(2) start a week before the wedding
- 3.Wedding when bleeding is expected give progesterone a week before the bleeding

Wedding date after next bleeding



Treat with combined pill, plan bleeding 21 days before the wedding, after 7 days continue with pill until wedding(3)

Option 2 plan the bleeding with progesterone, bleeding 21 days before wedding

- 1. Rule out medical CI for hormonal treatment. Discuss contraception options or pre pregnancy planning
- 2. Norethinesterone 10mg*2/day. 3. This is a good option for a woman with irregular bleeding

Table 1

In a case in which there is additional time until the wedding and the date of the wedding was set after the expected upcoming menstrual cycle, several options exist in order to manage the potential risk of menstruation around the wedding date. Most physicians (51%) will administer combined hormone pills to be taken in the regular manner. The bride should take the pills until 21 days before the wedding, stop for 7 days, and then continue until the wedding. Most physicians will choose a pill with high estrogen content (30-35 mcg EE). Notably, 27% prefer to use progesterone in this situation. Most physicians maintain that menstruation can be postponed for 7 days using progesterone, making use of the treatment to manipulate the menstruation time and bring it to approximately 3 weeks before the wedding.

With respect to women with irregular bleeding, several responses in free text from the physicians were received. Most (13) physicians maintained that combined hormone pills should be used. Other suggestions included a combination of several different medications.

Several physicians suggested discussing the issue of contraception after the wedding. Others offer a combined pill even when the wedding is close if the couple is not interested in pregnancy.

Discussion

This study evaluated how experienced physicians treat Jewish brides in order to prevent menstrual bleeding prior to the wedding and the halakhic complication of *hupat niddah*. Based on medical precedent and on physicians' answers, a management protocol may be proposed that would enable consideration of sensitivities of all those involved and a safe approach to management under the circumstances, taking all perspectives into consideration (see Figure 1). While manipulation of timing of ovulation in order to accommodate aspects of Jewish

law in rare circumstances has been previously described,⁹ this is one of the first reports of its kind to consider the much more common manipulation of menstruation around the time of a wedding.

It is advisable for the Jewish bride to consult with a physician regarding timing of her menstruation prior to the wedding. This appointment should be held early in the course of preparation for the wedding. A longer time will offer the bride and the physician more options to schedule the wedding and time the menstruation. During this meeting, it is also be appropriate to discuss the option of pregnancy or discuss contraception options depending on the sensitivities and specifics involved. The physician should offer the bride or the couple all possible information that they may require for various family planning decisions.

The benefits of this survey include that for the first time this clinical challenge is addressed and a simple protocol is recommended. Limitations of the survey include the fact that while it summarizes the clinical experience in the area, it was not conducted within the context of a clinical trial. Since it is very difficult technically and ethically to conduct such a study and the clinical problem is common, this information may nevertheless be useful for the clinician and the Jewish bride. In the future, more research in this area should be conducted in order to further characterize the challenge with empirical suggestions for clinical management.

I would like to thank Professor Rael Stauss for his help in reviewing and editing this work.

⁹ M.H. Dahan, M.S. Coffler, K.S. Patel, "Oral Contraceptives for Inducing Ovulation Delay in Orthodox Jewish Women: A Report of Two Cases," *J Reprod Med. Apr.* 50:4 (2005): 284-6.

Questionnaire

- 1. A woman comes to your clinic before her wedding. The date of the wedding is on the third week of her periodical bleeding. Her bleeding is usually regular and there are usually more than 21 days between her periods. The combined pill may cause bleeding in the beginning of the treatment and is not advised. How do you treat her?
 - * No treatment
 - * Progesterone before the wedding.
- 2. The same woman comes to consultation and the wedding date is in the fourth week after bleeding. What do you suggest?
 - * Progesterone before the wedding
 - * No treatment
- 3. Many physicians use progesterone treatment in these situations in order to prolong the luteal phase and postpone the bleeding. In your experience, how many days before the wedding should the treatment begin?
 - * 1-2 days
 - * 3-4 days
 - * 5-6 days
 - * One week
- 4. If progesterone is given in order to postpone the bleeding, what is the delay that can be achieved?
 - * 1-2 days
 - * 3-4 days
 - * 5-6 days
 - * 7 days or more
 - * Other
- 5. If there is more time until the wedding and another bleeding is expected before the wedding, choose be-

tween the following options:

- * I prefer timing the period with progesterone in this scenario as well.
- * I prescribe the combined pill continuously and stop 21 days before the wedding, allowing enough time for her to go to the *mikveh* after the bleeding.
- * I prescribe the combined pill continuously and stop 21 days before the wedding; after a 7 day pause, I have her continue the pill until the wedding.
- 6. When you suggest a combined pill, what is the preferred estrogen dose?
 - * 15-20 MCG EE
 - * 25 MCG
 - * 30 MCG
 - * 35 MCG
 - * The dose is not important
- 7. What do you suggest for a woman who does not have regular bleeding?
- 8. What is your medical expertise?
 - * Family practice
 - * Gynecology
 - * Other
- 9. How would you characterize the women you treat in terms of religious observance?
 - * Ultra-Orthodox
 - * Orthodox
 - * Traditional

Control of the Contro	

RABBI PETER KAHN

The Definition of a Human

The Museum of Natural History in New York City exhibits the bones of "Lucy," who scientists consider to be an early proto-human. The theory of proto-humans and their questionable human status poses a number of halakhic quandaries. For instance, what is Lucy's status with regard to the halakhah of tumat meit? May a kohen enter the Museum of Natural History, or must he be concerned for the transmission of tumat ohel due to Lucy's bones?1 For the purpose of this article, we will assume that the bodies of non-Jews transfer tuma through tumat ohel.2 The question thus hinges on whether Lucy is to be considered a human or animal; human bodies transmit tuma through tumat ohel, whereas animal bodies do not. If Lucy is human, it would be forbidden for a kohen to visit the Museum of Natural History. If, however, Lucy is considered an animal or non-human, a kohen would be permitted to visit the museum, just as he may visit a zoo where it is possible that an animal has recently died. In order to answer this specific question, we must consider what the precise distinction between man and animal is and how each is defined. This essay will explore a number of mod-

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¹ It is possible that the items in the Museum of Natural History are plastic replicas and not actual specimens, in which case this question is obviously not relevant.

² This point is subject to debate. For discussion of this question, see my article in *Tehumin* 34.

els through which to determine humanhood. The determining factors of humanhood will lead us to questions in a number of areas of Halakhah in addition to the question we have posed regarding *tumat ohel*.

Humans, Animals, and Human-Like Animals in the Torah

In describing ma'aseh bereishit, the Torah teaches that God presented all of the animals He had created to Adam, who proceeded to name them based on what he observed in their charicteristics.³ Ramban explains that Adam saw how each animal was distinct from and inferior to him, as well as what was at the core of each animal's being and nature.⁴ According to this standard understanding of Bereishit, humans are not simply higher forms of animals, but rather completely distinct beings, and Adam recognized this fact through his naming of the other animals. Humans are qualitatively different from animals. Indeed, it is apparent from the verses in Bereishit that it is the human who distinguishes between the different species of animals and, in so doing, is able to elevate himself above the natural order of the universe and other living beings.

Although it is apparent that humans are superior and

³ Bereishit 2:19.

⁴ Adam's naming of the animals is the first example of phylogeny in the Torah; Adam distinguished between each animal based on its observable characteristics, classifying each animal based on its function. Classification of animals based on their species continues to appear throughout the Torah. Noah, for example, gathers the animals to the *teivah* based on their species, and the *midrash* elaborates that Noah housed the animals differently based on their classification and provided for each animal based on its specific needs. *Sefer Vayikra*, in teaching the laws of *kashrut*, distinguishes between kosher and non-kosher types of animals based on physical traits, the phenotypical expression. Similarly, the *gemara* in *Hullin* (63) discusses the prohibition of *kilayim*, crossbreeding animals, based on identification of animals through their physical characteristics and distinction of species; see also Tosefta, *Kilayim* 1:5.

wholly unique from animals, many instances of hybrid beings or human-like animals are mentioned in Jewish literature. What is the human status of these hybrids or proto-human beings?

One important source to consider is a mishna in Kilayim that discusses whether one becomes tamei meit upon coming into contact with the corpse of "adnei ha-sadeh." There are many opinions as to what the adnei ha-sadeh is and what its status is. The Sages maintain that the similarity between the adnei ha-sadeh and a human being is not enough to make it "human" for the purposes of hilkhot tuma; they consider it a hayah, and it is therefore not metamei. Opposing this view, R. Yossi maintains that the similarities to a human is sufficient and the adnei ha-sadeh is in fact metamei.⁵

Rambam identifies the adnei ha-sadeh as an animal that is very similar to a human and can vocalize in a way that sounds like human speech, but these vocalizations are incoherent and incomprehensible to humans. Lacking the quality of human speech, the adnei ha-sadeh is not considered human.⁶ In an attempt to understand the precise identity of these creatures, Tiferet Yisrael writes that the adnei ha-sadeh is the oragantan, which can be taught to carry out a number of "human" tasks, although it is not human.⁷ It seems that most authorities agree that the adnei hasadeh does not have enough qualifying features to be considered human and tumat meit therefore does not apply in this case.

Among the other examples in the halakhic literature of creatures that are similar to humans is the case of the "dulfenin."

⁵ Kilayim 8:5. It is possible that R. Yossi maintains that the adnei ha-sadeh has the din of a human only regarding tumat ohel, but not regarding other halakhot. According to the Talmud Yerushalmi (Kilayim 8:4), this mahloket does not relate to whether or not the adnei ha-sadeh is human or not.

⁶ Rambam, Commentary on the Mishnah, Kilayim 8:5; Hilkhot Kilayim 8:5-6.

⁷ Encyclopedia Talmudit, vol. 1, s.v. "adnei ha-sadeh."

A beraita states that this is a creature that breeds like humans.⁸ According to Rashi's girsa, the dulfenin breed with humans. Rashi writes that these creatures are therefore half human and half fish. Given their breeding with humans, according to Rashi, where does the dulfenin fall in the spectrum of humans and animals?

There are a number of possible models through which we can attempt to make the distinction and determine human status. These models are human appearance, the birth/DNA model, human reproductive capacity, the ability to speak, and the moral intelligence model.

Human Appearance

The first model suggests that human status can be determined based on appearance; humans have human physical features. The mishna discusses the case of a woman who miscarries and the fetus has the appearance of an animal. While R. Meir maintains that the woman contracts tumat leidah, the Sages maintain that she is only temei'ah if the fetus has a human form.9 Clearly, the mishna defines "human" in this case as a being that looks like a human. The gemara records that R. Yirmiyah asked R. Zeira if such a creature – an "animal" born to a human – would be subject to receiving kiddushin. In other words, according to R. Meir, is such a creature considered human only in the context of tumat leidah, or for other halakhic purposes as well? The gemara concludes that the mishna was only discussing the case of a miscarriage and R. Yirmiyah's question was intended as a joke. 10 Tosafot note that regardless of the gemara's conclusion, the mishna's discussion is important because it broaches the question of whether a fetus is deemed

⁸ Bekhorot 8

⁹ Niddah 21

¹⁰ Niddah 23a and Rashi ad loc., s.v.. Rashi writes that R. Yirmiyah and R. Zeira disagree regarding how far one may go when joking.

a human or an animal even if it is not viable, and it seems to conclude that a defining factor is based on appearance.¹¹

The Talmud Yerushalmi further considers how the child should be defined in this case. ¹² Could someone born looking like an animal perform *yibbum* or *halitzah*? The Yerushalmi concludes that the Sages must deal with this question as well, as they define a fetus as human based on its facial features. What would happen if a creature were to have a human face and an animal body? Would it be considered human despite the fact that the rest of it is animal? Conversely, is it possible that a creature with a human body but the facial features of an animal could be sitting in the *beit midrash* and then be summoned for *shehitah*?!

Defining humanhood based on appearance – the "partzuf ha-adam" – is thus somewhat difficult. How "human" does one need to be in order to be considered human? Can it possibly be that it is only the facial features of a human that creates the status of human? Perhaps it is a combination of a human face and a human body that is necessary. But what then of a gorilla, which stands up? Does a gorilla sufficiently resemble a human? As we will continue to see throughout this exploration of human definitions in Halakhah, definining humanity on a spectrum presents challenges that lead to absurd conclusions.

R. Eliezer Flekeles (1754-1826) was asked regarding the status of a baby who was born with extreme deformities, looking more like an animal than a human. The child was suffering greatly, and its parents wished to euthanize the child out of a sense of compassion for the suffering of the neonate. The questioner suggested that the child did not have the status of a human and that it was therefore permitted to kill the child. R. Flekeles argues that the Yerushalmi's discussion is not meant to

¹¹ Tosafot ad loc., s.v.

¹² Yerushalmi Niddah 3:2.

¹³ Responsa Teshuvah Mei-Ahavah 1:53.

lead to the practical conclusion that humanity is defined based on appearance. Rather, the point of the Yerushalmi, as well as that of the Bavli, is that the *mahloket* between the Sages and R. Meir only pertains to miscarraiges, not actual births. Clearly, R. Flekeles writes, if a child is born to a human, it is considered human for all purposes, and it is therefore forbidden to kill it. This is an articulation of the "birth model" of defining humanhood, as we shall see presently.

The Birth/DNA Model

Another possibility adopted by many authorities is to define all progeny of humans as human. Indeed, man is referred to as "yelud isha," 14 "born of woman," implying that his status as human derives from the fact that he was born to another human. Futhermore, in his translation of Adam's reference to Havah as "eim kol hai," Onkelos writes that she is the "ima de-kol bnei ansha," "the mother of all of humanity," denoting that all progeny of Havah are considered human, bnei enosh. 15

The Hakham Tzvi (R. Tzvi Ashkenazi, 1656-1718) was the first halakhic authority to formulate the principle that a human being is legally defined as one who was formed in the womb of a woman. He bases this principle on the gemara's explication of the verse, "Whoever sheds the blood of man (dam ha-adam), by man (ba-adam) shall his blood be shed. Hazal tell us that this verse teaches that it is a capital offense for a ben Noah to kill a fetus in utero, ha-adam ba-adam (literally, "the man in man"). The Hakham Tzvi notes that the phrase "ha-adam ba-adam" teaches us that an organism formed within

¹⁴ Iyov 14:1; 15:14; 25:4; Avot De-Rabbi Natan, ch. 2; Yoma 75b; Niddah 13a; Devarim Rabbah (Vilna) 35:2; Bamidbar Rabbah 4:1; Tanhuma (Warsaw), Mishpatim 19, Pekudei 3, Bamidbar 19, and Ha'azinu 1.

¹⁵ Bereishit 3:8.

¹⁶ Responsa Hakham Tzvi 97.

¹⁷ Sanhedrin 57b.

¹⁸ Bereishit 9:6.

a human is considered human, and killing it is therefore tantamount to murder. The Hakham Tzvi further cites the story recorded in the *gemara* about R. Zeira, who destroyed a *golem* created by Rava.¹⁹ Clearly, the Hakham Tzvi writes, the *golem* was not considered human because it was not born to a human, but was rather created artificially by human hands, and there was therefore no problem in destroying it.²⁰

Despite the logic of this argument, R. Gershon Leiner (the Radzhiner Rebbe, 1839-1891) notes that there is an inherent logical flaw to it. According to this reasoning, Adam Ha-Rishon was not human, as he was not born to a woman!²¹ Furthermore, if we were to assume there was some form of evolution in the creation of man, Adam Ha-Rishon must have come from something else. According to this model, what makes him human if he was not born from something we would define as a human?

The simplest answer is that Adam Ha-Rishon is, by definition, the first human. Thus, anything that came before him is not considered human, while anything that came after him that was born from a human womb is a human. According to this view, proto-humans would not be considered humans, but rather animals or non-human creations. Any being that "preceded" the *homo sapien* is simply not human;²² the previous "forms" of humans were the other animals that existed when Adam was created.²³

¹⁹ Sanhedrin 65b.

²⁰ Accordingly, the Hakham Tzvi writes, a *golem* could not count as a member of a *minyan*, as he is not considered human.

²¹ Sce Sidrei Taharot, Ohalot 5a.

²² This assumes the Adam Ha-Rishon was a homo-sapien and that anything that phyolgenically comes after homo-sapien is human, while anything before was not. There are no sources of which this author is aware that would necessarily categorize Adam Ha-Rishon as a homo-sapien.

²³ R. J.D. Bleich shared this view with the author in the summer of 2014. The question of where the line is between *homo erectus* and *homo sapien* is not entirely clear. Presumably, according to evolutionary science, there was a period when both existed.

Returning to the question of the fetus mentioned above, R. Eliezer Flekeles defends the Hakham Tzvi's position and argues that once a fetus has achieved the status of a human, that status cannot be compromised by disease, behavior, or genetic manipulation. Once a person is a human, he is always a human, even if one of the ordinary characteristics of a human is lacking.²⁴ This idea can be applied to all of the models. Indeed, the position of the Hakham Tzvi accords with logic; once somone is a human, it is sensible to assume that such a status can not be removed, no matter the behavior.

A mishnah in Bekhorot artictulates a priciple that may be relevant in this context.²⁵ The mishnah states that "ha-yotzei min ha-mutar mutar ve-ha-yotzi min ha-asur asur" – the offspring of a kosher animal is kosher, even if it has the appearance and attributes of a non-kosher animal, and the offspring of a non-kosher animal is not kosher, even if it has the appearance and attributes of a kosher animal. In short, the status of the animal's mother determines the animal's kashrut status, not its own physical characteristics. In interpreting this rule, R. Elhanan Wasserman writes that this principle applies to all areas of Halakhah, not only kashrut.²⁶ Accordingly, R. J.D. Bleich argues that a clone should be considered human, as it is created from a human being, unlike a golem, which is merely created from the Sefer Yetzirah or through another metaphysical method.²⁷

This theory raises the interesting question of how to define the status of a human embryo that was implanted in an animal. Using the logic presented above, we would be forced

²⁴ Responsa Teshuvah Mei-Ahavah 1:53.

²⁵ Bekhorot 5b.

²⁶ Kovetz Haarot 5:33.

²⁷ See n. 24 above. R. Bleich argues that this is the view adopted by the Hazon lsh, who writes (Yoreh De'ah 116:1) that according to both opinions in the Talmud, miscarried fetuses are classified as human beings with regard to the laws of mourning and burial. The fetus is defined as human because it came from a human.

to conclude that a human born from an animal would be a human; the rule followed by R. Bleich is that the genetic origin of the human is the deciding factor. While this is certainly a novel and interesting position, it is somewhat question-begging. At what point is genetic material sufficient to warrant the definition of a human? This position would require additional attention to distinguish what precise human DNA features are required to define a human.²⁸

In an answer to the question of an embryo gestated outside of a womb, Dr. John Loike and R. Dr. Moshe Tendler argue that the definition of a human as a creature born from the womb of a woman can be expanded to include a creature whose development was initiated using cells or nuclei obtained from human beings.²⁹ Thus, the definition includes a child developed from an embryo that was formed in vitro and developed completely in an artificial incubator. If we assume this position to be correct, the definition of humanhood relies on the scientific definition of genetic makeup determining speciation. But as noted above, this position also must face the question of demarcation. At what point are we to draw the line at which sufficient genetic material makes the individual in question human or animal?

In addition, while this approach can help us classify beings created after humans exist, it does not address the status of Lucy's hummaness as her bones indicate she was from a time

²⁸ This is an example of a Sorites paradox, which revolves around definitions and identity. The paradox seeks to answer the following question: One has a heap of sand and removes one grain at a time. At what point does the heap of sand cease to exist? After one grain has been removed? When only one grain is left? When no grains are left? It is not hard to imagine future genetic therapies that would replace faulty human genes with those gleaned from either other species or other persons, thus making the question of answering the Sorites paradox far more relevant.

²⁹ R. M.D. Tendler and Dr. John Loike, 2003: "Mah Adam Va-Teda'ehu: Halakhic Criteria for Defining Human Beings," Tradition. Summer; 37(2):1-19.

befor Adam and Havah, "eim kol hai."30

Human Reproductive Capacity

Perhaps it is not only the fact that a being is born from a human that makes it human, but also the ability for it to create another human through reproduction. Commenting on the pasuk, "ve-hayu le-vasar echad," "and they will be as one flesh,"31 the gemara derives that only the union of a man and woman can prove fruitful; the union of a human with a domesticated or wild animal is non-productive because they cannot become one flesh.³² Thus, perhaps one can deduce that the definition of a human is related to the fact that human beings can only successfully reproduce with other human beings. The capacity of an organism to produce offspring with a human would therefore be considered another criteria of human identity.³³ This notion of the capacity to reproduce also lends itself to some important questions. What about the cases of a saris or aylonis, who are not physically capable of procreating? Would those individuals not be considered human? Again, this would lead to absurd conclusions and forces one to reconsider whether this is an absolutely necessary condition for humanity.

³⁰ Furthermore, it does not address the question of the status of "parts" of humans, such as human cells that are used to develop monoclonal antibodies or other drugs. If we create a human heart using human cells, does it have the status of a human body part for the purposes of tumah and taharah, even though it was never part of a human body? It is likely that Loike and Tendler intend their argument only to define a human as human.

³¹ Bereishit 2:24.

³² Sanhedrin 58a. Rashi highlights this principle in his comments on Rosh Hashana 5a. Tosefta Bechorot explicitly states that sexual relations between humans and animals are completely unfruitful.

³³ The *gemana* reflects the scientific fact that sexual relations between humans and animals cannot produce offspring, but even if it were theoretically possible for such relations to lead to offspring, that offspring would not be considered human.

The Ability to Speak

Another prominent model of how to define humanhood focuses on a human's ability to speak. Modern philosophers have suggested that among other traits, ethics and other human interactions are based on the ability to speak.³⁴ Interestingly, this school of thought is expressed by Hazal as well. A beraita in Hagigah notes that there are three differences between humans and animals: humans have intelligence, they walk on two feet, and they can speak Lashon Ha-Kodesh.35 Do the three qualities listed in the beraita define humanhood or simply describe it? In other words, is any creature that possesses these three qualities automatically defined as a human? Since this seems unlikely, it appears that the beraita is not attempting to define what a human is, but rather to simply record differences between humans and animals that are apparent upon observation. Nevertheless, these qualities are cited by later authorities in their attempt to define humanhood.

In his translation of the Torah's description of man as a "nefesh hayah," ³⁶ Targum Onkelos famously writes that man posesses a "ruah memalela" – that is, the ability to speak. Rashi writes that humans are superior to animals because they have been endowed with "de'ah ve-dibbur," "intelligence and speech." ³⁷ Rambam writes that the soul is expressed through the power of speech, which is the distinguishing feature of human beings. ³⁸ The definition of humanhood based on the ability to speak is further implied by Maharsha in his explanation of the geman about Rava's golem that R. Zeira destroyed upon discovering that it could not speak. ³⁹ Maharsha seems to indicate that the golem was not considered human because of its

³⁴ See Buber and Wittgenstein

³⁵ Hagigag 16a. The midrash (Bereishit Rabbah 8:11) adds a fourth difference – humans see, while animals are "metzaded."

³⁶ Bereishit 2:7.

³⁷ Rashi, ad loc.

³⁸ Moreh Nevukhim, ch. 41, "nefesh."

³⁹ Maharsha, Sanhedrin 65b.

inability to speak.

However, this position appears to be problematic, as it leads to the absurd conclusion that one who who does not have the capability to talk does not have the status of a human being. Furthermore, objects that we percieve as inanimate – such as plants and microbes – actually do communicate with other members of their species, although not through speech. What, then, deliniates non-human forms of communication from human forms?

The Radziner Rebbe writes that it is indeed speech that is the determining factor in defining humanhood. However, it is not the actual ability to speak that matters, but rather the "koah ha-dibbur." Only an amora on the level of R. Zeira could determine if someone has the koah ha-dibbur, and he was therefore able to destroy the golem. In other words, speech is an indication that a creature is human, but this factor essentially is often moot since its application can be challenging to apply. Again, the question arises – if some other being were to possess the koah ha-dibbur, would it indeed be considered human? For instance, parrots have been known to emulate human speech. Should we therefore define them as human? What about Koko the gorilla, who is able to sign her thoughts and feelings to her handlers?

The Moral Intelligence Model

Alternatively, emphasis may be placed on the other element of humanhood noted by Rashi – "da'at." Elsewhere, Rashi specifies that the superior "knowledge" of human be-

⁴⁰ Sidrei Taharot, Ohalot 5. When the beraita lists speaking Lashon Ha-Kodesh as a difference between humans and animals, it likely refers to the ability to speak Lashon Ha-Kodesh, not whether one can actually speak it. 41 Francine G. P. Patterson and Ronald H. Cohn, "Self-Recognition and Self-Awareness in Lowland Gorillas," pg 273 Self-Awareness in Animals and Humans: Developmental Perspectives, Cambridge.

ings refers to their "da'at tov va-ra" - that is, their ability to distinguish between good and evil, moral intelligence. It is not human IQ, intellect, or the ability to learn that is the distinguishing factor between humans and animals, but rather the ability to make moral choices. Similarly, Onkelos and Rambam vrite that the defining characteristic of a human being is the ability to distinguish between good and evil; this is why the Seven Noachide Laws were given to all mankind. Rambam writes elsewhere that free will is a component of "da'at." R. Tzadok Ha-Kohen of Lublin suggests that this is the determining model.

This model does not lead to as many absurd conclusions as the other models, but it does require some basic adjustment to account for infants and others who lack the ability to reason morally. Properly construed, this model would postulate that humans are members of a species whose members are able to engage in meaningful moral dialogue with others and thereby create a society based on the observance of moral laws and principles.

Loike and Tendler's Conclusion

Based on the approaches that we have outlined above, Loike and Tendler propose three criteria for the halakhic definition of humanhood: 1) being formed within a person or born from a person; 2) possession of moral intelligence; 3) capacity to produce offspring with another human. As long as a being

⁴² Rashi, Bereishit 3:22.

⁴³ While we may assume that this quality is lacking in animals, Ramban writes (*Bereishit* 9:5) that the *shor ha-niskal* is punished because it should have known better, implying that animals do have some form of moral intelligence.

⁴⁴ Onkelos, Bereishit 2:7.

⁴⁵ Rambam, Bereishit 2:7.

⁴⁶ Hilkhot Teshuvah 5:1. See also the view of R. Akiva in Bereishit Rabbah 12:5.

posesses at least one of these traits, he is defined as human.⁴⁷

Loike and Tendler note that these criteria are alluded to in the description of the creation of man in Bereishit: "This is the book of the generation of man on the day that God created man, in the likeness of God did He make them. Male and female did He create them and blessed them and called their names 'man' on the day when they were created."48 Ramban interprets these verses to mean that God declared that any descendants of Adam and Havah are human, implying the criterion that all organisms born from a human are halakhically human. 49 Seforno interprets the phrase "in the likeness of God did He make them" as signifying that humans were created with "da'at," corresponding to the criterion of moral intelligence.50 Finally, Ramban explains God's blessing to man as the blessing of the unique ability to reproduce only with one another. This corresponds to the criterion of human reproductive capacity.

Despite the cogence of this argument, I would like to suggest that there is more to the equation than simply adding together previously explicated criteria. Notably, given that each of the elements suggeted by Tendler and Loike have certain conceptual problems that render their use insufficient when considered alone, it is questionable whether the combination of them all renders the problem of defining a human fully solved.

I suggest that based on the sources explicated above, there is no straightforward or purely usable definition without any combinations or emendations. Perhaps this is simply due to the nature of science and its ability to fragment each component of personality, genetic makeup, and behavior; although more likely, it has to do with how we view what makes

⁴⁷ See Loike and Tendler, n. 31 above.

⁴⁸ Bereishit 5:1-2.

⁴⁹ Ramban, ad loc.

⁵⁰ Seforno, ad loc.

someone a human. Given that the expansiveness of the human community has typically fluctuated depending on historical context and other similar factors, 51 there are clearly subjective factors at work here that will likely prevent the clear definition of a human from being established. Instead, it seems that the perspective that leads to the fewest problems is to rely on the common language definition of a human (although philosophically and halachikally unsatisfying) as well as the hybrid model that Tendler and Loike suggest in concert with the other factors mentioned here. This hybrid model in no way suggests which of the factors are the neccessary or sufficient ones, but rather points to the need to have varying definitions of humanity that can encompass the richness of the human experience.

Modern Applications

These criteria of humanhood lead us to a number of halakhic quandries that arise due to modern advances in technology and medicine. These include:

 Cloning and in vitro fertilization: Most authorities agree that the resulting child of these processes is considered a human being.⁵² Since a cloned child is born from a woman, it meets at least one criteria of human-

⁵¹ In some religions, a baby is viewed as a member of the community starting at conception. On the other end of the spectrum, under the Groningen protocols, euthanasia (or "abortion") has been approved in the Netherlands for children ranging up to the age of 12. While these laws and policies are not a direct admission of the admissibility or lack thereof of these children into the definition of humanity, they certainly point in that direction.
52 "Symposium on Judaism, Genetic Engineering and the Cloning of Hu-

^{52 &}quot;Symposium on Judaism, Genetic Engineering and the Cloning of Humans," *Torah U-Madda Journal* 9 (2000): 182-247; J.D. Loike and A. Steinberg, "Human Cloning and Halakhic Perspectives," *Tradition* 32:3 (Spring 1998): 31-46. See also M. Broyde, "Cloning People and Jewish Law: A Preliminary Analysis," *Journal of Halacha and Contemporary Society* 34:23-65; idem., "Cloning People: A Jewish Law Analysis of the Issues," *Connecticut Law Review* 30:1-33; and J.D. Bleich, "Cloning: Homologous Reproduction and Jewish Law," *Tradition* 32:3 (Spring 1998): 47-86.

hood.

- Fetal development in non-human incubators: A child formed in an artificial incubator attains full human status according to the proposed definition.
- Transgenic monkeys: These monkeys carry human genes that enable them to develop a human face and/or human body, but they exhibit the same behavioral characteristics as other monkeys. They do not express moral intelligence and most likely would not be capable of producing offspring with humans for lack of genomic compatability. They thus do not exhibit any of the criteria of human identity and therefore would not be classified as human according to Halakhah.⁵³
- Human-Ape Chimera: In this situation, the majority of DNA is ape DNA, while the minority is human DNA.
 It can be inferred that the human DNA would be overriden, and the resulting being would not be considered human.⁵⁴

As noted above, in each of these cases, different principles are at work that play off of each other. Using one criteria alone would likely lead to incorrect conclusions, emphasizing the need for a robust and more flexible definition of humanity.

What is the Status of Lucy?

Based on what we have seen, we are closer to being able to determine Lucy's status. R. Bleich assumes that all such specemins are *tamei*, since the *midrash* writes that these were the animals that the people from the *dor ha-palaga* were turned

⁵³ One could argue that such a monkey would be considered human if it were to exhibit moral intelligence. However, it could never be considered Jewish, as that definition requires either the oocyte of a Jewish woman, birth from the womb of a Jewish woman, or the transplanted ovum of a Jewish woman.

⁵⁴ See Rambam, Commentary on the Mishna, *Kilayim* 9:1: "The well-known maxim applies: the minority becomes annulled in a majority, or a major disannuls a major quantity, or the lesser is cancelled by the larger."

into.⁵⁵ If we assume, as the scientists do, that Lucy is a proto-human, according to the definitions postulated earlier, Lucy would likely fail to meet the various criteria established and thus would be considered a non-human. However, given the nature of the question and the many *sefeikot* involved, it would likely be proper for *kohanim* to be stringent and avoid visting Lucy or any such pre-human beings.

⁵⁵ R. J.D. Bleich shared this view with the author in the summer of 2014.



RABBI DR. EDWARD REICHMAN

A Letter from an 18th
Century Torah Sage to
the Faculty of a Medical
School:
The Selective Deference of
R. Yonatan Eybeschuetz to
Medical Expertise

Introduction

The study of medical Halakhah today is the most complex it has ever been in history, as halakhic dilemmas increase exponentially in tandem with science. As always, good halakhic decisions require good facts. The literature of medicine is so vast that its mastery has long been out of the grasp of any one individual; it is impossible to be a *posek* in all areas of medical Halakhah today without a cadre of medical experts in one's

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The notion of consulting medical experts to adjudicate areas of Halakhah is by no means a new one, although perhaps the need has become more acute. As we will see, the Talmud already records such cases of medical consultation. The exact nature of the acceptance of medical testimony into the halakhic process, however, has been a matter of continued debate regarding "ne'emanut ha-rofim," the reliability or trustworthiness of physicians. This topic has been amply covered elsewhere;1 we focus here on the writings of one rabbinic authority. This brief entry represents a small contribution to this evolving literature. In this essay, we will focus on the relationship of one great 18th century Torah sage, R. Yonatan Eybeschuetz² (1690-1764), to contemporaneous medical knowledge. R. Eybeschuetz was a Talmudist and Halakhist of the highest order, an internationally recognized Torah giant who held positions as the dayan (rabbinic judge) of Prague and later as the rabbi of the "Three Communities" (Altona, Hamburg, and Wandsbek). He authored halakhic works on Shulhan Arukh and Rambam's Mishneh Torah, as well as a variety of homiletic works. He is famously known as the protagonist in the protracted Emden-Eybeschuetz controversy, to which we will refer below.³

¹ See A. Steinberg, Encyclopedia Hilkhatit Refuit (2nd ed.) (Jerusalem, 5766), vol. 5, s.v., "Ne'emanut Ha-Rofeh." This general topic includes both the reliability of physician testimony and the reliability of medical knowledge, such as blood typing, HLA testing, and DNA testing. See also R. A.Y. Kook, Da'at Kohen, n. 140 (regarding metzitzah), and S.T. Rubenstein, "The Reliability of Physicians in Matters of Halakhah" (Hebrew), Torah She-Ba'al Peh 33 (5752): 47-51. For a list of cases in which rabbis consulted physicians, see H.J. Zimmels, Magicians, Theologians and Doctors (London, 1952), 177, n. 59.

² There are variant spellings for the name: Eybeschutz, Eibeschutz, Eyebeschutz, and Eyebeschuetz.

³ This essay represents a small contribution about the writings of R. Eybeschuetz on medicine, a topic about which little has been written. R. Yaakov Emden, in contrast, addressed medicine more explicitly and frequently in his writings, especially relating to alchemy. For more on this topic, see the excellent work of Moaz Kahan, "An Esoteric Path to Modernity: Rabbi

R. Eybeschuetz cultivated relationships with non-Jews as well, collaborating, for example, with the Jesuit Father Franciscus Haselbauer and other Catholic clergy to publish editions of the Torah and Talmud.⁴ He also taught Hebrew to Christians, such as Olaf Gerhard Tychsen,⁵ who later became professor at the University of Butzow.⁶ Tychsen is famous in Jewish medical history for convincing the Duke of Mecklenberg to require delay of burial for three days to confirm death, targeting the Jewish population specifically; that law began the halakhic debates of the definition of death and delayed burial.⁷

R. Eybeschuetz was also conversant in the sciences, such as astronomy. This is reflected in his comments on the theories of Copernicus, with whom he disagreed and about which he debated with Christian theologians.⁸

In this essay, we will address the approach of R. Eybeschuetz to medical issues. The first example in our discussion,

Jacob Emden's Alchemical Quest," Journal of Modern Jewish Studies 12:2 (July 2013): 253-75; idem, "The Scientific Revolution and the Encoding of Sources of Knowledge: Medicine, Halakhah, and Alchemy in Hamburg-Altona, 1736" (Hebrew), Tarbitz 82:1 (Tishrei-Kislev 5774): 165-212.

- 4 See P. Maciejko, "The Rabbi and the Jesuit: On Rabbi Jonathan Eibeschutz and Father Franciscus Haselbauer Editing the Talmud," *Jewish Social Studies* 20:2 (Winter 2014): 147-84. I thank R. Dr. J.J. Schacter for directing me to this reference, as well as for other helpful suggestions.
- 5 S.Z. Leiman, "Two Cases of Non-Jews with Rabbinic Ordination," http://seforim.blogspot.com/2006/11/dr-leimans-post-two-cases-of-non-jews.html (November 16, 2006), accessed October 22, 2015.
- 6 In that capacity, Tychsen mentored Markus Moses, a Jewish medical student who completed a number of medical research papers on Jewish topics under his tutelage. See D. Wilk, "Markus Moses' Doctoral Dissertation or Who Remembers Butzow," *Koroth* 9:3-4 (1986): 408-26.
- 7 R. Yaakov Emden played a key role in that halakhic controversy.
- 8 See Jeremy Brown's definitive work on the Jewish approach to the work of Copernicus, *New Heavens and a New Earth* (Oxford, 2013), 155-61.
- 9 While R. Eybeschuetz is perhaps best known for his prescription of amulets, these were not in the realm of conventional medical practice. As such, we refrain from addressing this topic here and restrict ourselves to conventional medical matters. See S.Z. Leiman and S. Schwarzfuchs, "New Evidence on the Emden Eybeschuetz Controversy: The Amulets from Metz," Revue des Etudes Juives 165:1-2 (January-June 2006): 229-49.

to which the title refers, stands at the interface of two of Jewish history's most storied and contentious chapters, upon which we will elaborate. Although this source is fascinating in isolation, it is important to study it in tandem with other opinions of R. Eybeschuetz in order to gather a full picture of his view. Thus, following our historical discussion of this first example, we will analyze a number of other medical passages culled from his different works in order to flesh out his approach to medicine.

The Case of the Heartless Chicken Background

In his commentary on Yoreh De'ah, R. Eybeschuetz comments on the halakhic status of an animal whose heart has been removed. 10 Is such an animal considered a tereifah, a term applied to animals with terminal pathological conditions that limit their longevity? Or is it considered a neveilah, a term restricted to a dead animal, as it is impossible for an animal to live without a heart for even a moment? There are legal ramifications to this definitional distinction. While R. Karo codifies that an animal whose heart has been removed is a tereifah, 11 Rambam famously omits this law from his code. This glaring omission spawned much conjecture over the centuries. R. Eybeschuetz postulates that while Rambam was medically convinced that a "heartless" animal would indeed be a neveilah, as it could not possibly live at all in such a state, his inability to find clear halakhic support for this scientifically-based position forced him to omit this law altogether.

In this context, R. Eybeschuetz cites a related responsum. In 1709, a housewife asked a simple question of R. Tzvi Ashkenazi (Hakham Tzvi), the answer to which would reverberate for centuries. In preparing a chicken for dinner, the woman was unable to locate the chicken's heart. Is such a chicken kosher?¹² R. Ashkenazi used this question as a spring-

¹⁰ Kreti U-Pleti, Yoreh De'ah 40:5.

¹¹ Shulhan Arukh, Yoreh De'ah 40:5.

¹² Responsa Hakham Tzvi, 74 and 77.

board to discuss the importance of the heart in general.¹³ Regarding the matter at hand, he concluded that the chicken was kosher because it is impossible for the chicken to have been born and to have survived to the point of slaughter without a heart. It must therefore be that the chicken was never, in fact, heartless; rather, it simply appeared to be so, as a cat had likely eaten or removed the heart. R. Ashkenazi went even further, adding that if two upstanding witnesses opened a chicken and claimed that they found no heart, we would declare them to be false witnesses¹⁴ and the chicken would be considered kosher. This controversial statement was subsequently addressed by a number of rabbinic authorities.¹⁵ Among them was R. Eybeschuetz, who, while agreeing with R. Ashkenazi's ruling in this specific case, took particular exception to his additional statement, which he militantly disputed.¹⁶

R. Eybeschuetz's Letter to the Medical Faculty of the University of Halle

R. Eybeschuetz argued that perhaps animals can have other structures that serve the function of the heart, and the animal might therefore externally appear to lack a "normal" heart. Such an animal would be considered a *tereifah* due to the abnormal anatomy. It could therefore possibly appear to wit-

¹³ Elsewhere, this author has placed the theories of R. Ashkenazi on cardiac and respiratory physiology into a medical historical context. See E. Reichman, "The Halakhic Definition of Death in Light of Medical History," *The Torah U'Madda Journal* 4 (Spring 1993): 148-74; idem, "The Incorporation of Early Scientific Theories into Rabbinic Literature: The Case of Innate Heat," *The Torah U'Madda Journal* 8 (1998-1999): 181-99.

¹⁴ Based on Rashba 1:98.

¹⁵ Hakham Tzvi im Likutei He'arot, 2nd ed. (Jerusalem, 5765), 409-13. I thank Professor Shnayer Leiman for directing me to this reference.

¹⁶ Rashba had ruled that if witnesses testify that an animal designated by *Hazal* as a *tereifah* actually lived longer than twelve months, we would consider them false witnesses and uphold the words of *Hazal*. According to R. Eybeschuetz, this decision was applied to render a stricter decision, but could not be applied to render a lenient decision, as R. Ashkenazi did in this case by considering the chicken kosher and allowing it to be eaten.

nesses that an animal was "heartless," when in fact it possesses a heart substitute; it is considered a *tereifah* (as opposed to a *neveilah*) and is thus halakhically forbidden.

To support this novel scientific theory and clarify the facts, R. Eybeschuetz wrote a letter to the University of Halle medical faculty to obtain the definitive medical view on this issue. He enlisted the assistance of R. Henoch Halle to personally deliver an inquiry, "what they call a responsum," to the university. He records their response in its entirety:

We have received two questions for which we do not know the reason. It has been requested of us to provide our expert medical opinion from this institution based on the principles of medicine and anatomy. We convened together and after analysis and discussion, we agreed upon the following response, which we present before you. The substance of the first question: Is it possible for an animal to live for any period of time after the heart has been removed, either through sickness or through any other means? First of all, you should know that there is no possibility whatsoever for a heart to disintegrate through sickness. It is true that there are illnesses that affect the heart directly, and experience has shown that these can weaken and diminish the heart's function. One may also find a growth [in the heart] in the shape of an insect, called the polypus... However, in all these cases, the heart remains anchored in the chest cavity and does not move from its place, nor does it disintegrate or disappear completely, something which is impossible.

The animal stricken with this cardiac illness will struggle to survive as long as the disease does

not overcome him and the heart, the source of life, does not cease to beat entirely. But if the disease progresses to the extent that cardiac motion ceases, then certainly the creature stricken with this disease will die. It is evident from this that if it was conceivable for the heart to somehow be completely removed [through disease], surely the creature would succumb. For it is impossible for a creature to live even one moment, just as it is impossible for any being to live, if the heart is physically removed or cut out. Such a creature would die immediately or within a brief time once the heart is removed...

Regarding your second query: If a chicken or similar bird is opened and no heart is found, is it possible that there is another structure that serves the function of the heart? We preface our response with this principle: It is physiologically impossible for any living creature, whether bird or animal, to live without a heart or some analogous structure which serves the same function. Such a structure must have a cavity with connected vessels, which serve to transmit and circulate the blood to the rest of the body. Therefore, if there is such an analogous organ with the required specifications for the physiological function usually required for the heart, it is certainly possible for a bird to live for a prolonged period of time, even if the organ does not bear external resemblance to the heart, even if the organ is found in a different anatomical location than the heart, either above or below. All this we have agreed upon.

A Newly Discovered Corroboration of the Letter

In my recent research on the history of Jewish medical students, 17 I came across a slim volume that documents the Jewish physicians of the 18th-19th centuries at the University of Halle as reflected in the holdings of the university archives.¹⁸ The University of Halle opened its doors to Jewish students at that period, which was a rarity in Europe. In addition to documenting the Jewish medical students at this time, this volume also mentions correspondence between the Jewish community and the medical faculty, mostly related to specific medical consultations. It occurred to me that the archives might also contain a record of the question posed by R. Eybeschuetz regarding the heartless chicken. I contacted the University of Halle archivist, 19 noting the aforementioned volume, and provided suggested dates and context, using the date of the publication of the Kreti U-Pleti, 1763, as a rough chronological guideline. Remarkably, my inquiry was soon met with a positive response.20

Mr. Stefan Fink, whom I thank for his assistance, sent me a copy of a handwritten entry that, though scant on details, clearly refers to the question of R. Eybeschuetz. Below is the text, followed by his translation:

¹⁷ E. Reichman, "The History of the Jewish Medical Student Dissertation: An Evolving Jewish Tradition," in press.

¹⁸ W. Kaiser and A. Volker, Judaica Medica des 18 und des Fruhen 19 Jahrhunderts in den Bestanden des Halleschen Univeritatsarchivs (Halle, 1979).

¹⁹ The authors of the aforementioned book are no longer affiliated with the University of Halle.

²⁰ In retrospect, I realized that the archival section referring to the question of R. Eybeschuetz had actually been pictured in the book of Kaiser and Volker all along, though it was barely legible and not identified. The line above it, regarding a medical consultation from the Jewish community, was noted in the accompanying caption. After completion of this article, I found that R. H.J. Zimmels (1900-1974) had also written to the University of Halle to see if the case of R. Eybeschuetz was kept in their records, although he received a negative response. See Zimmels, op. cit., 178.

1763 den 8. Januar ist ein Responsum auf 2 von der Judenschaft übergebene Fragen, wegen einiger bey ihren Schächten vorkommenden Umstände, ertheilt worden. 21 January 8, 1763: A responsum to 2 questions from the Jewish community concerning the circumstances of Jewish kosher slaughter has been issued.

R. Eybeschuetz used the word "responsum" as the term for the inquiry, which is identical to the term in the text from the archives; the topic of discussion was ritual slaughter; two questions were asked, and the date is appropriate, as the *Kreti U-Pleti* was published later in 1763. Thus, this entry clearly refers to our letter. Unfortunately, the text of the faculty's response is not included in the archival record. However, since the text of the entire response is included in the work of R. Eybeschuetz, its absence from the archive is of limited consequence. Its dating, however, does have ramifications for another fascinating chapter in Jewish history.

Historical Relevance of the Letter

The date of the query, January 1763, may have some historical consequence relating to the famous dispute involving R. Yonatan Eybeschuetz and R. Yaakov Emden. Indeed, it may place the final nail in the coffin of a long discredited theory about the origins of their prolonged and bitter battle.²² The lifelong rivalry between these two towering Torah giants of the 18th century has provided sustenance for many a Jewish historian. One of the subchapters of this discussion focuses on the origins of the rivalry. Most trace its beginnings to the discovery of amulets penned by R. Eybeschuetz intended for

^{21 &}quot;Tagebuch der Medizinischen Fakultät" 1744-1801, Universitätsarchiv der Universität Halle-Wittenberg, Rep. 29/F/VII, Nr. 1, Bd. 1, Blatt 173r. 22 I thank Professor Shnayer Leiman and R. Dr. J.J. Schacter for their assistance and guidance regarding the content of this section.

the protection and safety of pregnant women and their fetuses. These amulets were found to contain possible veiled references to the false messiah, Shabbtai Tzvi, which invoked the ire of R. Yaakov Emden.

R. Reuven Margulies, however, suggests that the controversy actually began when R. Eybeschuetz disagreed with the psak of the Hakham Tzvi, R. Emden's father, regarding this very case of the heartless chicken.²³ This theory is predicated on the assumption that R. Eybeschuetz sent the query to the University of Halle when he was a young man, shortly after the original responsum of the Hakham Tzvi was written. The archival dating of the question clearly proves otherwise, confirming that the query was submitted much later - just one year before R. Eybeschuetz' demise. Thus, there is now definitive chronological evidence to the view of the scholars that this letter could not possibly have initiated the feud.24

The University of Halle and the Jews

It is noteworthy that R. Eybeschuetz specifically chose the University of Halle as the destination for his query. There were other prominent medical schools in Germany at the time. Perhaps he made this choice because, in addition to being one of the premier medical schools in the 18th century, it was particularly open to Jewish students, similar to the University of Padua in Italy, and was the address for many Jewish students of this period. This might explain why his colleague, R. Henoch Halle, had entrée into the halls of the university.

²³ R. Margulies, Sibat Hitnagduto shel Rabbeinu Yaakov Mei-Emden Li-Rabbeinu Yehonatan Eybeschuetz (Tel-Aviv, 1941). I thank Professor Leiman for graciously furnishing me with this reference.

²⁴ Dr. Leiman has drawn my attention to the fact that there are many substantive reasons why this theory is baseless, including the fact that R. Eybeschuetz in principle agreed with R. Emden regarding the analysis of the heartless chicken case. In fact, in R. Emden's personal copy of the Kreti U-Pleti, which contains his handwritten marginalia, he even accuses R. Eybeschuetz of plagiarizing his writings on this topic. See Y. Raphael, "The Notes of Rabbi Yaakov Emden to the Kreti U-Pleti of Rabbi Yonatan Eybeschuetz" (Hebrew), Sinai 74 (1974): 37-41.

At the same time as R. Henoch Halle was delivering R. Eybeschuetz' letter to the University of Halle, likely sitting in a classroom a few yards away was Leon Elias Hirshel, a Jewish medical student in his final year of study. Hirshel graduated in 1763, writing his dissertation on manic depression. Many of the dissertations of the Jewish students in Halle have been documented; of note is that in over a span of some 100 years, two of the Jewish students wrote their dissertations on uniquely Jewish topics. 27

The Heartless Chicken and the Modern Day Debate on the Definition of Death

While there was debate as to how long the heartless chicken itself could survive, the halakhic debate surrounding it remains very much alive. For millennia, death was defined exclusively as cessation of heartbeat, although, to be sure, the ability of physicians to accurately diagnose death was often challenged. In the late 20th century, a new and alternate diagnosis of death was advanced, known as brain death. This new medical diagnosis generated an array of profound halakhic ramifications, as any modern reader with a modicum of interest in medical Halakhah will attest. The discussion of the acceptance of cessation of brain function as a legal definition of death is known as the brain death debate,²⁸ and this debate remains one of the most prolonged, animated, and contentious debates in medical halakhic history.

²⁵ Leon Elias Hirschel, *De Morbis Melancholico-Maniacis*, University of Halle Medical Dissertation, 1763.

²⁶ See, Kaiser and Volker, op. cit.

²⁷ Salomon Bernard Wolffsheimer wrote on gynecology and fertility in Rabbinic literature in 1742, and Meyer Levin wrote on the history of the Jews and medicine in 1798. Both of these dissertations were written in Latin, as was the convention for dissertations of that time. For further discussion of Jewish medical student dissertations on Jewish topics, see E. Reichman, "The History of the Jewish Medical Student Dissertation: An Evolving Jewish Tradition." in press.

²⁸ For an overview of the brain death debate, see A. Steinberg, *Encyclopedia Hilkhatit Refuit* (2nd ed.) (Jerusalem, 5766), vol. 6, s.v., "rega ha-mavet."

In seeking halakhic precedent for this novel dilemma, posekim resuscitated the halakhic chapter of the heartless chicken that was launched by the responsum of the Hakham Tzvi.²⁹ In that responsum, R. Ashkenazi devoted a lengthy discussion to the primacy of the heart in the definition of life. The authorities who require cardiac cessation to define death turned to this responsum as support.³⁰ The subsequent responses to the Hakham Tzvi, including the passage from R. Eybeschuetz, have also been incorporated into the contemporary halakhic discussions.

R. Levi Yitzchak Halperin, writing on the topic of organ donation and the determination of death in Halakhah, devotes an entire chapter to the reliability of physicians regarding the determination of death and focuses on the case of the heartless chicken and the responses of Rabbis Ashkenazi and Eybeschuetz. He asserts that both of them invoked and relied upon medical opinion in the formulation of their halakhic responses.³¹

Our discussion thus far leaves the impression that R. Eybeschuetz was respectful of and deferential to the knowledge of physicians, even actively pursuing their consultation to assist in halakhic analysis. Was this consistently his approach? We now turn our attention to other passages from his works that relate to medical matters in the hopes of garnering a more complete and nuanced view of his integration of medical knowledge.

The Remarriage of Widowed Nursing Mothers

R. Eybeschuetz solicited and referred to medical ex-

²⁹ See, for example, Iggerot Moshe, Yoreh De'ah 2:146.

³⁰ See, for example, J.D. Bleich, "Of Cerebral, Respiratory, and Cardiac Death," *Tradition* 24:3 (Spring 1989): 44-66.

³¹ Ma'aseh Choshev 4:23, chapter 14. R. Halperin specifically emphasizes that R. Eybeschuetz relied upon the physicians when they do not contradict the received tradition (kabbalah) of Hazal. See below for further discussion on this issue.

perts in the case of widowed nursing women. In addressing a number of different cases on this topic, he provides valuable insights into his approach to medical knowledge. Since this area of Halakhah is lesser known, we will first present a basic overview of the principles of this topic, known as *meineket haveiro* (the nursing woman/wife of one's friend).³²

Shulhan Arukh rules that if a woman is widowed or divorced at the time when she is pregnant or while she is nursing an infant, she may not remarry until the infant reaches the age of twenty-four months.33 The Sages enacted this prohibition out of concern that the woman, in her desire to remarry and realizing that her options are more limited while she nurses an infant, may try to wean the child prematurely in order to raise the chances of finding a husband. Twenty-four months is the age when babies would generally stop nursing, and the Sages feared that a child would be endangered if the mother discontinued breastfeeding before that age. They therefore enacted a decree that a woman who is divorced or widowed while she is pregnant or nursing should not get married, or even accept kiddushin (halakhic betrothal), until the child is twenty-four months old. This ensures that she will continue nursing the child until that time.34

In one circumstance, the elder R. Akiva Eiger, author

³² For a comprehensive review of halakhic issues related to nursing, see S. Kohen, *Torat Ha-Meineket* (Jerusalem, 5772). Regarding the application of the decree to delay remarriage nowadays, when ample milk substitutes are readily available, see pp. 120ff.

³³ Shulhan Arukh, Even Ha-Ezer 13.

³⁴ See http://www.dailyhalacha.com/m/halacha.aspx?id=2086. If, in a situation where this prohibition does apply, the woman remarried in violation of the halakhah, the rabbinic court uses its authority to coerce the new husband to divorce the woman. It places the husband under nidui (excommunication) until he agrees to give the wife a divorce, and he pays her ketubah. Assuming he is not a kohen (in which case he is forbidden from marrying a divorcee), he may remarry the woman after the child reaches the age of twenty-four months, and, of course, he must write a new ketubah. There are a number of exceptions to this law, such as if the child dies or if the woman stopped nursing even before her first husband died.

of *Mishnat Rabbi Akiva Eiger*,³⁵ penned a permissive ruling to a question regarding the remarriage of a widowed nursing woman. He forwarded his responsum to R. Eybeschuetz for analysis and corroboration of his conclusion, a common practice in responsa literature.³⁶

The question to R. Eiger involved a woman who refrained from nursing for a medical reason.³⁷ R. Eiger ruled that the law of *meineket haveiro* did not apply to this woman, as the medical situation precluded her nursing in any case. She would thus be free to marry without delay. However, due to the gravity of the situation and ambiguity of the nature of the medical condition, he forwarded the query to R. Eybeschuetz for consideration as well.

R. Eybeschuetz introduces his response with an endorsement of R. Eiger's conclusion and declares, "Halakhah ke-Rabbi Akiva," playing off the Talmudic principle that the law follows the position of the Tanna R. Akiva. We will focus primarily on the medical comments of this lengthy responsum. R. Eybeschuetz references a responsum of R. Yaakov Reischer

³⁵ Grandfather of the better known R. Akiva Eiger, author of *Hiddushei Rabbi Akiva Eiger*.

³⁶ See Bnei Ahuvah 1 (Jerusalem, 5767), section She'eilot U-Teshuvot, siman 1, pp. 283-98.

³⁷ The facts of the case are as follows: A physician had married a woman who died of tuberculosis ("Schwindsucht" is the term mentioned in the responsum), which the physician attributed to her breast-feeding. He subsequently married his first wife's sister and adamantly forbade her from nursing out of fear she would succumb to the same condition. They had ten children, none of whom she nursed. Upon the death of the physician husband, the woman was pregnant. The community suggested that she marry another physician, who would then practice in the town. Timing was a factor in the marriage arrangements; there was concern that the physician would not agree to marry her if there was delay. However, the normative halakhah required waiting 24 months after the birth of the child of the widowed woman. The question to R. Eiger was whether this case represented a possible exception to the rule of meineket haveiro, as the woman had not nursed any of her previous children and would dare not nurse any subsequent children due to a medical concern.

regarding the application of the law of meineket haveiro.³⁸ In that case, the physicians determined after the death of nursed children that the mother's milk was poisonous and that she should refrain from nursing any subsequent children lest the same fate befall them. The rabbis who ruled permissively based their ruling on the fact that since the woman's milk was deemed poisonous, there was no fear whatsoever that she would ever nurse, and the decree of meineket haveiro was thus rendered moot.

R. Eybeschuetz casts aspersion on the permissive ruling (although he ultimately accepted it) based on his medical analysis. The doctors had claimed that the woman's milk was poisonous. According to R. Eybeschuetz, based on the research of scientists, a woman's milk is a composite derivative from the vessels of the body that come from the heart. Thus, if the milk of a woman were poisonous enough to cause fatal harm to her children, surely she herself would manifest serious signs of illness. In fact, however, the woman in question was known to be quite healthy and well-nourished. R. Eybeschuetz therefore

38 Shvut Yaakov, Even Ha-Ezer, 97. In that case, the woman nursed her first three children, all of whom died during the period of nursing. She went on to have additional children, all of whom were nursed by a hired nursemaid. Her husband then died while she was pregnant with an additional child, and she hired a nursemaid for that child as well. The question was whether she could remarry immediately, as there was no fear that she would nurse her child.

This responsum includes the full text of the response of a rabbinic authority who ruled strictly in the case and forbade the woman from remarrying early. While that author remains anonymous in the published *Shvut Yaakov*, R. Eybeschuetz, in discussing the case, reveals the author's identity as R. Avraham Brode, who had been involved in a disagreement with Hakham Tzvi. R. Brode devotes a section of his response to the reliability of physicians.

39 The Talmud states that breast milk derives from blood, presumably menstrual blood. See, for example, *Niddah* 9a. This was not a uniquely rabbinic notion and was espoused by many scientists and cultures from antiquity to pre-modern times.

40 R. Eybeschuetz happened to have personal knowledge of the facts in this case. The woman was a distant relative of his, and she later came to visit his wife in Prague, when he was able to confirm the nature of her health.

deems the woman's physician to be incompetent.

R. Eybeschuetz consulted with a certain Zalman the physician as to whether a woman with poisonous milk could appear so healthy, and Zalman concurred that it was impossible.⁴¹ In addition, as with the case of the heartless chicken, R. Eybeschuetz presented the case to a medical faculty, in this instance the University of Prague, whose members concurred with his analysis and added that there are but a few cases in which the mother's milk can cause harm to the child, and they are both rare and eminently treatable.⁴² The halakhic nuances of the case of R. Reischer notwithstanding, R. Eybeschuetz again solicited expert opinion as part of his halakhic analysis.⁴³ As a side note in this responsum, he comments on another medical aspect of nursing and its impact on the halakhic analysis. R. Eybeschuetz takes issue with the position held by some rabbinic authorities that if a woman's breasts had "shriveled" (i.e., she had not been able to nurse/produce milk during a previous pregnancy or pregnancies) and she is now pregnant when her husband dies, she would not be required to wait 24 months after the birth of the child in order to remarry. 44 He questions

⁴¹ Zimmels identifies him as Zalman Gomperz, although I am not sure on what basis. See Zimmels, op. cit., 28. The Gomperz family was a famous European Jewish family dating from the 16th century. I found brief reference to a Salman Gumperz (d. 1728), who was a physician, with no accompanying biographical information. If this is the correct Zalman, then this passage would have been written by R. Eybeschuetz before the age of thirty-eight.

⁴² I made no effort to find archival evidence for this consultation, as it appears from the language, as well as the absence of any recorded written response, to have been a verbal inquiry. Zimmels also wrote, in vain, to the University of Prague to identify reference to this query. See Zimmels, op. cit., 178,

⁴³ While his analysis would clearly impugn the validity of the decision rendered by the rabbis to permit this woman to remarry, R. Eybeschuetz contends that God does not allow legal miscalculations or mistakes to befall the righteous ones (referring to the sages who permitted the woman to marry). He therefore argues that there must have been other valid reasons to render a permissive ruling.

⁴⁴ Maharik, Yam Shel Shlomo, and Beit Shmuel.

the assumption that previous lack of milk production portends a future of the same. He argues that according to the scientists, each pregnancy is unique and it is completely possible for a woman to be "dry" for one pregnancy yet nurse normally subsequently, "as the matter is explained in all the books of hakhmei nituah, which they call anatomy in their language."45 In a related exchange with R. Aryeh Epstein regarding another case of a nursing mother, R. Eybeschuetz clarifies his criteria for invoking and incorporating medical expertise into his halakhic decisions. 46 This passage provides specific parameters for the integration of medical information into the halakhic process. R. Eybescheutz asserts that the permissive ruling allowing the woman to remarry in that case is based exclusively on the physicians' testimony that her milk had caused the death of one child and grave harm to a second. He affirms that this is an appropriate incorporation of medical knowledge into a halakhic decision, but he adds the following general rule: "We do not rely on physicians in rendering a lenient decision, but to render a strict decision we can surely rely upon them." He further clarifies another dimension of the use of physicians' opinion regarding a case of potential medical risk (pikuah nefesh). In such cases, we most certainly accept the opinion of physicians to create doubt (safek) as to whether a condition is life threatening, and the Halakhah is unequivocal that we would violate Shabbat based on such a doubt.

Bathhouse Insemination

In another passage in his Bnei Ahuvah, 47 R. Eybeschuetz'

⁴⁵ He repeats the same notion in his response to R. Epstein (addition to *siman* 1, p. 306); see text below.

⁴⁶ Bnei Ahuvah (Jerusalem, 5767), vol. 1, section She'eilot U-Teshuvot, appendix to siman 1, pp. 299-306. This teshuvah of R. Eybeschuetz was published in the work of R. Aryeh Leib Epstein and was not originally included in Bnei Ahuvah. The editors of this edition added it as an appendix, as it relates to the same subject matter.

⁴⁷ On Rambam, Hilkhot Ishut 15:6.

approach to contemporary medical knowledge appears at first blush to be utterly inconsistent with that in the cases above, in which he took initiative to enlist medical expertise. In discussing the notion of bathhouse insemination and whether one fulfills the *mitzvah* of *peru u-revu* thereby, he cites the *Helkak Mehokek*, who answers in the affirmative. ⁴⁸ In the course of the analysis, R. Eybeschuetz takes particular issue with the position of *Mishneh Le-Melekh*, who entirely rejects the physiological possibility of bathhouse insemination. ⁴⁹ While R. Eybeschuetz refutes this position based on a textual analysis of *Mishneh Le-Melekh*'s sources, he nonetheless wonders how an authority of such stature could reject an accepted medical supposition of the Talmud, especially since the Talmud mentions no dissenting opinions.

R. Eybeschuetz' treatment of this medical issue is quite different than the cases cited above. He writes:

Bathhouse insemination is surely possible, as the ancient physicians have written. And do not pay heed to the later physicians ... who deny the possibility. They simply reject notions of which their imaginations are incapable of understanding. Their grasp of the realities of nature is as the dog laps from the ocean. There are many examples where they have attempted to supersede their predecessors only to have fallen short. Their practice reflects that they struggle to treat even minor ailments effectively, while

⁴⁸ Helkak Mehokek, Even Ha-Ezer 1:8.

⁴⁹ The view of *Mishneh Le-Melekh* is based on a passage in Tosafot, according to which pregnancy can only be achieved through the completion of the act of coition. Conception could therefore not be achieved through the waters of a bathhouse. For further discussion of bathhouse insemination in rabbinic literature, see S. Emanuel, "Pregnancy Without Sexual Relations in Medieval Thought," *Journal of Jewish Thought* 62:1 (Spring 2011): 105-20; E. Reichman, "The Rabbinic Conception of Conception: An Exercise in Fertility," *Tradition* 31:1 (1996), 33-63.

their predecessors could successfully and completely cure major diseases.

This view so sharply differs from the one we saw above that it almost appears to have been written by someone else, not the same person who seems so deferential to the expert wisdom of contemporary physicians. This apparent contradiction is easily explained, however, by one essential fact. Bathhouse insemination, the possibility of which could realistically have engendered a lively debate amongst reproductive physiologists of his time (or ours, for that matter), was an accepted rabbinic tradition (kabbalah) dating back to the Talmud. According to R. Eybeschuetz (and others), such matters, even if they are medical in nature, are not subject to analysis or reinterpretation by even the best of contemporary physicians. It is therefore not inconsistent that R. Eybeschuetz elicited medical consultation in the cases of the heartless chicken and the nursing woman, regarding which no tradition exists.

Laws of Niddah

The *locus classicus* for the topic of reliability of physicians is a passage in *Niddah* (62b), where medical opinion is explicitly elicited by the Sages in order to resolve a halakhic issue. This passage has received expansive treatment elsewhere; our concern presently is restricted to the approach of R. Eybeschuetz. 51

The discussion revolves around the case of a woman who was passing particulate matter. In general, any natural uterine bleeding confers the status of *niddah*. However, if there is an abnormal uterine lesion or wound that is the source of the bleeding, the blood flow does not render the woman a *niddah*. How does a rabbi make such a determination, and is medical

⁵⁰ See Steinberg and Rubinstein, op. cit., n. 1.

⁵¹ I thank R. Mordechai Dinerman for drawing my attention to this passage.

consultation considered or required in such cases? The Talmud records a case in which the Sages consulted physicians, who determined that the woman had an internal lesion that was the source of her discharge. Upon hearing the medical opinion, the Sages declared that a scientific test should be performed on the particulate matter. The material should be placed in water; if it dissolves, that is an indication that it is menstrual blood, and the woman is rendered impure, but if it does not dissolve, that is an indication that it is from a pathological lesion, and she is rendered pure.

The fundamental question addressed by R. Eybeschuetz is the purpose of the medical consultation. Since the Sages required the water test, it appears on the surface that either they did not trust or did not rely upon the medical opinion. The testimony of the physicians about the presence of a pathological lesion should have been sufficient to resolve the matter. On the other hand, if the medical opinion is completely discounted and has no bearing on the halakhic conclusion, then its recording in the Talmud seems superfluous. After citing his predecessors (including the Hakham Tzvi, who had debated this precise point) and attempting to clarify their respective positions, R. Eybeschuetz offers his own novel resolution. The Sages indeed required verification of the medical opinion through the use of the water test. However, once the water test would be performed three times with the discharge not dissolving, thus confirming the medical opinion by virtue of hazakah (legally established pattern), there would be no need to test any further episodes of discharge. In the absence of medical testimony, he argues, it would be required to test every single discharge of this woman in perpetuity to clarify its halakhic status. Accordingly, the medical testimony is an essential component of the halakhic decision and merits inclusion in the Talmudic passage.

Evident from this analysis is R. Eybeschuetz' respect for medical opinion, although it is not an unqualified, blind acceptance. In a tangent, R. Eybeschuetz provides further insight into the limitations on the acceptance of medical consultation:

Our Rabbis taught, "The best of physicians are destined for Gehinnom," even though the Torah states, "And you shall surely heal," giving license for the physician to practice medicine. However, the Torah only speaks of the treatment of external conditions, such as a fractured hand or a skin lesion or wound, as this is visible to the naked eye and readily perceivable... In such a case, the physician can fully comprehend the condition. Such is not the case, however, for ailments of the internal organs, over which the eye [i.e., perception] of the physician has no rule. In such situations, the physicians merely judge according to their intellect... such that many have died as a result...

This internal-external distinction is not unique to R. Eybeschuetz, although he does find himself in a distinct minority in maintaining it.⁵²

Formation of Twins

Our final source is found in the homiletic works of R. Eybeschuetz and is perhaps more noteworthy for the absence of medical consultation.⁵³ R. Eybeschuetz invokes a medical

⁵² Ibn Ezra is most famous for espousing this notion, although the Karaites believed it as well. See his commentary on *Shemot* 21:19. For a novel interpretation of the position of Ibn Ezra, see M.M. Sha'aria, *Meishiv Nefesh* (Vilna, 1908), 20a-21a. For other authorities who specifically link the reliability of physicians to the internal-external distinction, see Zimmels, op. cit., 24 and 181 n. 99. Zimmels does not mention this passage from R. Eybeschuetz.

⁵³ Ya'arot Devash (Lvov, 5623), 100a. This passage is discussed in E. Reichman, "Is There Life After Life: Superfetation in Medical, Historical, and Rabbinic Literature," in J. Wiesen, ed., And You Shall Surely Heal (New York, 2009), 39-55. See also Ya'arot Devash n. 14 on teshuvah, which refers

notion in the service of a homiletic idea, but his medical comments, not verified by specific medical consultation, nearly produced disastrous results for one innocent man.

In the context of a homily in his Ya'arot Devash, R. Eybeschuetz addresses the origins of King David and the ultimate Messiah. In discussing the lineage of King David, R. Eybeschuetz queries why the progeny of the union of Yehuda and Tamar should be considered tainted. After all, prior to matan Torah, the obligation of yibum (levirate) devolved upon the father as well as on the brother. Thus, Yehuda was fulfilling a mitzvah through his union with Tamar; the resulting progeny should not only be free of stain, they should be considered superior!

To answer this question, R. Eybeschuetz posits that only the first coition fulfills the *mitzvah* of *yibum*, while any subsequent coition is merely a product of human desire, not for the sake of the *mitzvah*. Furthermore, he asserts, twins cannot be born of one coition, but rather require two. As a result, only the first of the twins born to Yehudah and Tamar, who was conceived through the process of a *mitzvah*, is associated with royalty. The second twin (Peretz), however, would be susceptible to stain.

This notion of the requirement of two coitions to produce twins was read by an eighteenth century European businessman. Prior to his departure on a long journey, this man engaged in marital relations with his wife. Upon his return some months later, his wife gave birth to twins. Remembering the homily of R. Eybeschuetz, he assumed that his wife must have been unfaithful, and he approached R. Yehezkel Landau for rabbinic advice. Rabbi Landau roundly criticized the questioner and dismissed out of hand the scientific ideas discussed in R. Eybeschuetz' essay.⁵⁴

to *Hazal* as expert physicians in their understanding of spiritual and mental health and in their guidance on how to perform *teshuvah*.

⁵⁴ Noda Be-Yehuda, Mahadura Tinyana, Even Ha-Ezer 81. R. Landau added that not only are two coitions not required to produce twins, but based on

Conclusion

We began with a discussion of R. Eybeschuetz' letter to the medical faculty of the University of Halle, addressing both its historical importance, aided by an archival discovery, as well as its role in understanding the approach of R. Eybeschuetz to medical and scientific information. Had we seen that letter of R. Eybeschuetz in isolation, it would have misrepresented his integration of and selective deference to medical knowledge, as reflected in other sources. Below is a provisional list of the guidelines for his incorporation of medical information into the halakhic process extracted from the sources presented:

- 1. Medical information may be accepted as long as it does not conflict with the tradition of *Hazal* (the heartless chicken, the nursing widow, bathhouse insemination).
- 2. Medical information may be integrated to render a strict halakhic opinion, but not to render a lenient one (the nursing widow).
- 3. The reliability of physician testimony is restricted to visible, external medical conditions (laws of *niddah*).
- 4. While physician testimony is accepted in certain circumstances, if the information they provide is verifiable through testable means, such testing should be performed (*laws of niddah*).
- 5. Specifically in cases of *pikuah nefesh*, we can accept the opinion of physicians, even if only to create enough doubt about the possibility of danger to allow the violation of Shabbat (the nursing widow).

Talmudic passages, sequential coitions could not produce two viable twins, as one would invariably become a "sandal." R. Landau invokes the Talmudic dictum that superfetation (with the subsequent birth of two viable children) is not possible. In fact, while the possibility of superfetation is debated, the possibility of superfecundation is universally accepted. Twins could indeed be produced through sequential coitions in one ovulatory cycle in a case of superfecundation. For more on the definition of these terms and the notion of superfetation in *Hazal*, see E. Reichman, "Superfetation," op. cit.

A complete picture of the unique position of R. Eybeschuetz regarding the integration of medical information will be revealed only through analysis of all his medical citations coupled with a proper comparison of his approach to those of other rabbinic authorities. This humble contribution will hopefully further this objective.