ורפא ירפא

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

Volume VII





ורפא ירפא

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

EDITORS

Rabbi Peter Kahn Rabbi David Shabtai, MD

EDITORIAL ADVISOR Rabbi Edward Reichman, MD

ASSOCIATE EDITOR

Natalie Vinegar

THE MICHAEL SCHARF PUBLICATION TRUST OF THE YESHIVA UNIVERSITY PRESS NEW YORK



Copyright © 2017 Yeshiva University

All rights reserved
The Michael Scharf Publication Trust of Yeshiva University Press
New York
ISSN 2372-3963
ISBN 13: 978-1544070490
Available at Amazon.com and other retailers.

Verapo Yerape welcomes new submissions and letters to the editor.

Contact the journal at verapo.yerape@gmail.com

Contents

Foreward by the Dean of the Rabbi Isaac Elchanan Theological Seminary

vi

Foreward by the Dean of AECOM

ix

VBAC in Jewish Law:

Halakhah, History, and Philosophy

Rabbi Dr. Yaakov Jaffe

1

An Orthodox Jewish

Approach To Hospice Care

Edward R. Burns, M.D.

Hemophilia and Circumcision From Observation to Classification: Connecting a Talmudic Presumption to a Modern Diagnosis

> Daniel Eisenberg, MD 33

The Valmadonna Trust Broadsides: A Virtual Reunion for the Jewish Medical Students of the

University of Padua

Rabbi Edward Reichman, MD

Foreword by the Dean of RIETS

We are excited to present this seventh 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 our talmid Rabbi Elliot Schreier, rabbi of the Einstein synagogue for all of his work with the Einstein community.

The Verapo Yerape journal is an important contribution to the fascinating world of medicine and halakhah, which has been a burgeoning field of scholarship in recent years. We live in an age where scientific discoveries, new treatments and seemingly miraculous innovations appear almost daily. Baruch Hashem, Klal Yisrael has been given a Torah system to grapple with and clarify whatever new discoveries the world of science has to offer mankind.

The name of this journal signifies its mission - *Vrapo Yerape* (Ex. 21:19). Chazal tell us (Bava Kama 85a) that this pasuk teaches us that we are *permitted* to heal others or hire doctors to heal on our behalf. Rabbi Menachem Nachum Twersky of Chernobyl (1730-1787 in *Sefer Me'or Einayim*) suggests that once the permission is given a certain wisdom - a special Torah wisdom to heal - naturally follows. Some of that wisdom is contained in the pages that follow.

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 as-

pects 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 who has provided the leadership and encouragement necessary to bring our efforts to fruition. I also congratulate the editors and contributors 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.

Rabbi Menachem Penner (RIETS '95) Max and Marion Grill Dean of RIETS 21 Tevet 5777

Foreword by the Dean of AECOM

I've had the privilege of being asked to write introductory remarks to several editions of Verapo Yerape. It's akin to a Dean or a Principle writing introductory letters to a yearbook. I've never actually checked to see whether the same remarks get repeated each year, but it wouldn't surprise me. There is, however, a critical difference. Yearbooks represent a memorial to years of being taught. These volumes are erupting volcanoes of original creative work. Each one, by its contents, represent new contributions to the realm of Halacha, history and medicine. Writing a congratulatory forward to such a work represents a celebration of intellectual vitality and creativity. How lucky are we at Einstein to be an incubator for such originality?

The collaboration between Einstein and RIETS in the execution of these volumes of Halacha and Medicine represent an admirable blueprint as to how these two institutions can remain partners in spite of corporate realignment. Both institutions should be proud that Einstein's Torah observant students are living examples of Kiddush Hashem. I see it in their interactions with patients and with teachers. You represent the best that modern orthodoxy has to offer. Examples of that best are in this album.

Edward R. Burns, M.D. Executive Dean and Professor of Medicine



VBAC in Jewish Law: Halakhah, History, and Philosophy

RABBI DR. YAAKOV JAFFE

A natural birth of a second child that follows a Cesarean birth (C-section) of a first child (also known by the abbreviation VBAC) is a relatively common procedure today, with more than sixty thousand such births taking place annually in the United States.¹ By definition, this procedure involves a woman giving birth to a second or third or fourth child (but not a first child), and the prevalence of the procedure is therefore more common in the observant community than in the general public on account of larger family size in that community. The VBAC procedure is of interest to Jews in evaluating the halakhic questions that the procedure involves, but also in considering the historical and philosophical perspective Jews have towards the procedure, going back two thousand years to the time of the Mishnah.

1 The Centers for Disease Control, User Guide to the 2014 Natality Public Use File, Documentation Table 13, as relates to National Center for Health Statistics Natality 2014 Public use file (National Center for Health Statistics, 2015).

Rabbi Dr. Yaakov Jaffe serves as the rabbi of the Maimonides Minyan and as the Director of Tanach Studies at the Maimonides School. He received his ordination and doctorate from Yeshiva University, where he holds graduate degrees in Bible, Jewish History, and Jewish Education. He has published more than two dozen scholarly articles on a wide array of topics, including Tanach, Jewish Philosophy, and Jewish Law. Rabbi Jaffe also serves as the Menahel of the Boston Rabbinical Court.

Statistics

Roughly a third of all births in the United States are C-sections,² some medically indicated and some elective, with more than a million of the nearly four million annual births in the United States being C-sections (1,228,459 out of 3,837,663 in 2014). As a result, roughly 15% of all pregnant women in the US have had at least one prior C-section (566,149 women in 2014), and the issue of how their next child might be delivered is therefore of particular interest.

Any woman who had a prior child born via C-section is faced with a bilateral choice for a future delivery: the next delivery could be also through a second C-section or with natural birth (i.e., VBAC). This choice is a relatively recent one; until the early 1980s, natural birth was not considered an option after C-section. By 1997, 30% of births to women with a prior C-section were using VBAC; more recently, that number has declined to under 10%. Historically, the rate of C-sections in Israel has been lower, and the rate of successful VBACs is higher.

Every VBAC attempt can result into two results: either a VBAC birth, or an unplanned, second C-section. Remarkably, women who attempt to give birth naturally following a C-section are more likely to be successful than unsuccessful. Nevertheless, more than 80% of women with a prior C-section do

² Ibid. and F.G. Cunningham, et al., "National Institutes of Health Consensus Development Conference Statement: Vaginal Birth After Cesarean: New Insights. March 8-10, 2010," Obstetrics & Gynecology 115(6) (2010):1279–95

³ It is beyond the scope of this article to discuss the reason for this change, which may have to do with legitimate, medically indicated concerns, physicians' fear of malpractice lawsuits, or women's fear of the risks of VBACs. 4 For example, see S. Mor-Yosef, A. Samueloff, J.G. Schenker, "The Israel Perinatal Census," Asia-Oceania Journal of Obstetrics and Gynecology 18(2) (1992): 139-45. In 1992, the C-section rate was only 10% and the VBAC rate was 55.1%. (As an aside that will become important below, the uterine rupture rate for trial of VBAC at that time was 1.2%, but only .02% in the general situation). While these numbers have changed since 1992, as compared to the United States, the C-section rate remains lower in Israel and the VBAC rate substantially higher.

not elect to even attempt a VBAC delivery, some for medical reasons and many for personal preference reasons.⁵ The chart below attempts to clarify the prevalence of the various birth conditions in the United States, based on the 2014 CDC birth data:⁶

Total Number of Births	3,837,663	
Births to women with	3,257,379 (85%)	
no prior C-section		
Of those, C-sections	724,855 (22%)1	~20% of total
Of those, natural births	2,532,524 (77%)	~65% of total
Births to women with	566,149 (15%)	
prior C-Section		
Of those, natural births	63,996 (11%)	~1.5% of total
Of those, C-sections	502,153 (89%)	~13% of total

This chart captures the nature of the problem. Each year, thousands of women who could undergo VBACs instead opt for a second C-section. Is this situation one that is promoted by Halakhah and Judaism? Is it condoned? Or should it be discouraged?

Halakhic Factors

Halakhah condones undertaking risky medical procedures under certain circumstances. In general, Halakhah requires that one undertake a risk benefit analysis to ensure that the risk is worth the benefit of the procedure.⁷ Indeed,

⁵ Sally C. Curtin, Kimberly D. Gregory, Lisa M. Korst, and Sayeedha F.G. Uddin, "Maternal Morbidity for Vaginal and Cesarean Deliveries, According to Previous Cesarean History: New Data From the Birth Certificate, 2013," National Vital Statistics Reports 64(4) (May 20, 2015).

⁶ This is also known as the "primary C-section rate," the number of C-sections to women who previously had none.

⁷ For a good summary of the various positions on this issue, see Chaim

physicians and hospitals throughout the United States undertake similar cost benefit analysis in determining which procedures to recommend, even for the general public. As a result, in general, a useful heuristic is that any procedure recommended by physicians probably involves benefits that outweigh risks, whereas any procedure that physicians discourage entails a risk that outweighs benefits. Although this situation can be complicated at the end of life, when desired outcomes may differ between Jews and physicians (as Jews may have greater commitment to the perpetuation of life than the medical community in certain circumstances), all sides generally looking towards the same goal at the instance of birth. However, at the margins, there may be instances in which medical professionals will discourage a procedure with negligible risk for extraneous reasons, or, conversely, instances in which medical professionals will encourage a procedure with a risk that Halakhah might consider too great.

Turning to our issue: whether the second child is born naturally or through a caesarian section, the most likely result is a healthy delivery for the child and healthy outcomes for the mother. Formulated slightly differently, in general, both a second C-section and a VBAC seem to have low, almost negligible risks and costs. When the costs are minimal or nonexistent, we turn towards the benefits, and here we discover that the benefits of VBAC are substantial – so much so that Halakhah would surely allow VBACing (over repeat C-section), would likely encourage it, and might even demand it. Of course, attempted natural births do not always result in successful natural births, but in those cases, the most likely unintended result – another C-section – are no different than the other choice in the first place.⁸

Jachter, Gray Matter III (Kol Torah Publications, 2008), 28-41.

⁸ See n. 1 above. It is important to emphasize that the most likely result of an unsuccessful VBAC attempt is a successful C-section. Consequently, even if the success rate for attempted VBACs is low (63% in women with no prior natural delivery, 83% in women with a prior natural delivery before cesarean delivery, and 94% in women with a prior VBAC), most of the

This is for three reasons. First, VBAC entails quicker maternal recovery time, and maternal strength and ability to take care of the newborn child would be sufficient grounds to argue for the permissibility of the procedure given the low risk. Second, VBAC has the added benefit of avoiding the need to wound oneself. Although medically indicated surgery is usually considered permissible, as it is considered a necessary wound, one could question if an entirely unnecessary surgery undertaken proactively would violate the letter or at least spirit of the prohibition of *havalah* (self-wounding). Finally, maternal deaths, although thankfully rare in both VBAC and C-section cases, are slightly more common in cases of repeat cesareans (at term .0095%) than they are in cases of successful VBAC (.002%). 11

However, although there are clearly a number of small or moderate benefits in attempting a VBAC, there are also a number risks to bear in mind. ¹² On the other hand, the possibility of uterine rupture, also rare in both cases, is slightly greater in cases of failed VBAC than in repeat C-sections. Although various studies have pegged the uterine rupture rate differently, they consistently show that failed VBAC has increased rate of rupture than repeat C-section. ¹³ Should an in-

unsuccessful VBAC cases result in successful C-sections. Although obstetricians note that a planned C-section is generally safer than an emergency C-section after a failed trial of VBAC, it remains the case that these emergency C-sections are generally successful.

- 9 Because a C-section is a major surgery, while a VBAC is simply a natural birth, women recover and return to previous health and strength much sooner in the case of VBAC.
- 10 See Shulhan Arukh, HM 420:31, and the discussion in Iggerot Moshe, HM 2:66, and Yabiya Omer, HM 8:12.
- 11 See n. 1 above.
- 12 There is a vast literature about the amount of risk Halakhah tolerates for the sake of having children, as in the ancient world the maternal risk was significant, while the halakhic benefit was minimal. See Tzitz Eliezer 15:37:2 and Mishneh Halakhot 4:249.
- 13 See, for example, K.E. Fitzpatrick, et al., "Uterine Rupture by Intended Mode of Delivery in the UK: A National Case-Control Study," PLoS Med 9(3) (2012): e1001184. doi:10.1371/journal.pmed.1001184. The rate of uterine rupture among all women with a prior C-section is .1%. This study

creased risk of uterine rupture be sufficient to halakhically prohibit VBAC and require a repeat C-section? Uterine rupture, itself a rare event, can lead to various outcomes, some serious and others critical. It can result in hysterectomy (in 10% of cases, although this is also a potential result of any C-section), 14 maternal death (in ~1% of cases), or fetal death (in 12% of cases), along with other serious outcomes and potential hospitalizations for mother or child. Thus, the halakhic question can be formulated as follows: Should/may/must one proactively undertake a surgery (and its associated minor detriments) in order to avoid a risk that has a .1% likelihood of occurring, wherein the said risk can have major ramifications half the time and minor ramifications the other half of the time? Or would Halakhah be silent in these cases, arguing that the small level of changed risk is not sufficient for Halakhah to take a clear position?

Of course, in some cases, doctors will advise that a particular woman's health history indicates that an attempted VBAC is not possible (taking into account if she has had more than one C-section, the proximity of the second pregnancy to C-section date, and the use of an incision other than low

found that the rate was .03% for a second planned C-section, but .2% for failed trial of labor. However, the study found that the rate can be decreased to .13% in VBACs when labor commences naturally and is not induced. The source cited above in n. 1 places the numbers at .07% for a planned second C-section and .5% for failed trial of labor.

14 Put differently, if .01% of VBACs lead to hysterectomy (following failed VBAC and uterine rupture), but a greater number of repeat C-sections lead to hysterectomy (.14%, as a consequence of the C-section itself), then the two choices here contain equal risk of the same event, albeit through two different pathways. See n. 1 above and Cynthia S. Shellhaas, et al., "The Frequency and Complication Rates of Hysterectomy Accompanying Cesarean Delivery" Obstet Gynecol. 114(2 Pt 1) (Aug. 2009): 224–9.

Hysterectomy often follows a C-section in an effort to prevent hemorrhaging. This is obviously something Halakhah avoids due to the emotional consequences and the effect on having future children. Nevertheless, hysterectomy is halakhically permitted if medically indicated or to save the life of the mother.

transverse for the first C-section). In this case, Halakhah would also argue for a second C-section because the risks of a VBAC would clearly increase to the point that a C-section would be preferable. The converse is also true – women with prior successful VBAC are more likely to have additional successful VBAC. One could argue that in those cases, the risk decreases to such an extent that Halakhah would mandate VBAC and not another C-section.

Repeat C-sections can also pose certain risk factors that may lead to conditions in which future pregnancies become impossible. After a C-section, the likelihood of placenta previa increases from .9% to 1.7% (it becomes 3% after the third C-section); the likelihood of placenta accreta increases from .32% to .57% after the second C-section (it becomes 2.4% after the third). Given the halakhic value placed in large family size, 16 these issues would be of greater concern for the Jewish community than they might be among the general American public, where the typical number of children is two or fewer, such that complications preventing an additional birth may be less important after the second child is born.

History

The *mishnah* in *Bekhorot* mentions the possibility of both birth by C-section and by VBAC: "A *yotzei dofen* (lit., one who comes out of the wall) and the one who is born after him – neither are considered the firstborn for purposes of inheritance or the [need for a] *Kohen* [to perform a *pidyon ha-ben*]." This *mishnah* speaks rather matter-of-factly about the procedure, giving an impression that the procedure was prevalent and not so risky as to have been considered certainly deadly for the

¹⁵ Brian M. Mercer, et all, "Labor Outcomes With Increasing Number of Prior Vaginal Births After Cesarean Delivery," Obstetrics & Gynecology 111(2:1) (Feb. 2008): 285-91.

¹⁶ See Yevamot 62b.

¹⁷ Bekhorot 47b.

mother.¹⁸ This has troubled physicians and medical scholars for generations, who were not aware of any previously recorded examples of successful VBAC to that time.¹⁹

Although the Talmud does at times engage in theoretical thought experiments about somewhat fanciful medical conditions, the Mishnah rarely does, and the Talmudic discussion in this context does not give any indication that this topic was theoretical. Moreover, whereas certain complex scientific scenarios may have been misunderstood or incorrectly depicted in the Mishnah, one cannot imagine that a second natural birth

18 The mishnah speaks of the procedure as if it happened regularly. If all women who survived C-sections put their lives at risk by attempting VBAC, the Talmud would have discussed if a mokh should be used to prevent future pregnancy or whether an abortion would be permitted if the woman became pregnant; see Yevamot 12b and Ohalot 7:6.

19 See Rambam loc. cit. and see also Jeffrey Boss, "The Antiquity of Caesarean Section with Maternal Survival: The Jewish Tradition," Medical History 5 (1961): 117-31, for a full discussion.

Pařízek A. et al. "Prague 1337: The first successful caesarean section in which both mother and child survived may have occurred in the court of John of Luxembourg, King of Bohemia" Ceska Gynekologie (2016) 81.4 (321-330) have recently offered the suggestion that in their view Beatrice of Borubon was the first woman to survive a C-section, and that she did so in the year 1337. Beatrice had only one child, so she did not give birth to a second child using VBAC, but the authors believe that sources about the birth of her first son still might possibly indicate he was born via C-section. However this recent article fails to accurately capture the general state of medical science at the time and focuses on one singular event, see Green, Monica H., Bibliography on Medieval Women, Gender, and Medicine (1980-2009) Sciència.cat: March 2010.

Much of the literature discussed in these sources discuss C-sections in the middle ages, where women and children usually died, as evidence that successful birth by C-section in Europe did not begin until 1500 at the earliest (although this also was a singular event, which may not have even be a C-section) or perhaps later in 1610 (and in any event, with the mother nor surviving.). Women regularly surviving C-sections in Europe began only in the 19th century. Yet, for our purposes, we note that C-sections are discussed more frequently in the Roman period, but then go unmentioned in Europe in Europe until the 13th century, leading to the conclusion that the science of C-sections may have been lost in the Middle Ages, when it was more practiced in antiquity.

would be confused with VBAC. If the Jews at the time were not aware of any successful VBACs or women who survived a C-section, it is hard to imagine the Talmud would have had such a straight presentation of the material, without discussing the impossibility of VBAC.

The contrast with the case of the man with two heads who wishes to wear *tefillin* is telling.²⁰ In that context, the hypothetical question is presented in the Talmud and is not provided as a direct ruling in a *mishnah*. Furthermore, before providing a ruling, the sages of the Talmud are at first incredulous that such a situation could even occur. In contrast, there is no question or surprise at the *mishnah*'s treatment of VBAC, indicating that at least in Mishnaic times the procedure was well known and permitted. Obviously, however, the risks of a second C-section were greater at that time than they are now, and the permissibility of the procedure in a historical lens therefore does not necessarily prove anything about how the Halakhah would rule given modern medical technology.

As the *mishnah* states, in the event of a successful VBAC, the second child born is not considered the firstborn or the "*peter rehem*," "the first through the womb." Although he is technically the first child born through the womb, since he is not the "first *born*," the status of being *peter rehem* is not sufficient for him to be considered the halakhic firstborn and to require a *pidyon ha-ben*.

Philosophy

Rambam's treatment of the issue from a historicalphilosophic perspective is important, but it should also give us pause:

²⁰ See Menahot 37a. This would only be possible in the case of conjoined twins who lived in that state until the age of 13. It is unclear whether this is what the Talmud actually had in mind. See Edward Reichman "Are Two Heads Better Than One" Verapo Yerape 4, 25-49 for a full discussion.

The possibility of this matter to me would be if a woman would be pregnant with twins, and they remove one of them via the wall, and then for the second to come in the manner of the world, and then for that woman to die after the birth of the second. But what they tell stories about — that a woman could live after a C-section and become pregnant and have children — I know no explanation for this, and it is very wondrous.²¹

This statement of Rambam is noteworthy in its discussion of the relationship between faith and science for two diametrically opposed reasons. On the one hand, this statement reveals Rambam's profound respect for the science of the Talmud and a willingness to defend that science. Although the Talmudic case of a VBAC in a subsequent pregnancy seemed impossible to his mind, 22 Rambam would not merely dismiss the mishnah for being unscientific. Thus, in order to allow the Talmud to coexist with the science, Rambam simultaneously expanded his notions of scientific possibility (considering the possibility of twins born one naturally and one via C-section, an idea that he seems not to be perfectly comfortable with) and expanded his notions of Talmudic possibility (reading the mishnah in an unusual manner).²³ This might inspire us to consider creative solutions to conflicts whenever the *mishnah* appears to disagree with science, much as Rambam does here.

On the other hand, Rambam's statement must give us pause, as he judges the scientific possibilities of the *mishnah*

²¹ Commentary on the Mishnah, Bekhorot 47b

²² It is unclear what exactly about the case Rambam judged to be impossible – whether the mother surviving a C-section at all (as Tiferet Yisrael took it), or – as the language "and become pregnant and have children" seems to indicate – her ability to conceive following the C-section, which must have undoubtedly included hysterectomy to avoid hemorrhaging.

²³ In the other examples in the chapter, the cases of subsequent births are clearly subsequent pregnancies and do not refer to a second twin born (for example, pregnancy following a miscarriage, pregnancy of a woman who had children in a previous marriage, pregnancy of a woman who had children prior to conversion, etc.).

in terms of the possibilities of his day. Rambam did not know what we know – that the *mishnah*'s case is indeed possible in our natural world and is not "miraculous" by any means. Perhaps the lesson that we can learn from Rambam's statement, then, is less that we should be inspired to consider creative solutions, and more that we should adopt greater humility before considering the cases discussed in the Talmud to be entirely impossible.

Did the *mishnah* address VBAC because it was possible and regular in that time, although Rambam was not aware of it? Did the *mishnah* foresee that it might be theoretically possible, addressing it because medical technology would one day allow for VBAC? Whatever the answer, the *mishnah*'s prescient treatment of what is today a common procedure is inspiring in its foresight.

Conclusion and Linguistics

In any event, the VBAC procedure seems to have been known to our sages, and therefore seems to have been around in some shape or form for nearly two thousand years. However, the cost-benefit analysis of the procedure may have changed over time. The jurists and physicians of every generation must issue new recommendations on the basis of evolving or changing medical science.

It would seem that today some women with certain risk factors might be halakhically prohibited from attempting VBAC, while others might be halakhically advised to attempt VBAC given low risk and significant halakhically recognized benefit. As C-sections become more common, the medical factors change, and the recommendation may therefore change as well.

Interestingly, the fact that C-sections have become more common has also had a linguistic effect on the Hebrew name for the procedure. The *mishnah* terms the procedure "yotzei dofen," which literally means "departing via the wall," as

the child leaves the womb via the abdominal wall. Of course, in the ancient world, such a procedure was very rare, and the phrase therefore became a metaphor in the Hebrew language for very rare occasions. Eventually, the metaphor became so common (and C-sections increasingly less common) that it became a dead metaphor, used exclusively to refer to rare events and no longer for C-sections, the original use of the word.

Today in Israel, C-sections are, in fact, far from rare; they are no longer "yotzei dofen," and so a new word would be needed to refer to the ancient procedure. The Modern Hebrew term for a C-section is now "Nitu'ah Keisari," a literal translation of the English, while the Ancient Hebrew term "yotzei dofen," is used only to refer to rare situations. Evidently, all the lives saved through C-sections in the year since, turned the miraculous and uncommon into the typical and the regular, and thus the term "yotzei dofen," was laid to rest, and a new term born in its place.

An Orthodox Jewish Approach To Hospice Care

EDWARD R. BURNS, M.D.

There has been a natural aversion and distrust towards the concept of hospice care for end of life palliation in the orthodox Jewish community. Although there are little firm sociologic data to support such a statement, it is generally accepted that for patients who have various terminal diseases such as cancer, degenerative neurologic diseases and multi organ failures one still should "do everything" as it may save the patient. This approach differs sharply from both the gentile population and the non-observant Jewish population which frequently embraces hospice for end of life care. This difference is easily explained by a rich tradition of Talmudic approaches that address the sanctity of life as well as a general lack of knowledge as to what services hospice can and should provide. An examination of the rulings of contemporary poskim will demonstrate that there is definitely a place for hospice care in appropriate circumstances in accord with orthodox Jewish practice.

Why is There an Issue in Providing Solely Palliative Care According to Halacha?

Jewish teachings are suffused by the concept that Jewish life is of infinite value and, as such, every moment of it has inestimable worth. That reasoning suggests that our obligation to treat patients are the same whether treatment can prolong one's life for many years or only several seconds. In fact there is a Talmudic source for this conclusion. The Shulchan Aruch (Orach Chayim 329:4) teaches us that if a building collapses

Dr. Edward Burns is Professor of Medicine and the Executive Dean of the Albert Einstein College of Medicine of Yeshiva University

on the Sabbath and a person is trapped under the debris, then one is obligated to do everything, including violating all Sabbath laws, to save him even if he may survive for only a few moments. This is derived from the biblical verse "You should keep my statutes and my laws, which if a man obeys, 'va'chai bahem' [he shall live through them], "[Vayikra 18:5]. The phrase "he shall live through them" is interpreted to mean that he shall not die because of them, thus justifying Sabbath violations to save a life. This is one of the major sources of the "do everything" approach.

Diametrically opposed to this position is a Talmudic passage from which it can be inferred that for patients in extremis one need not do everything. The Gemara in Ketubot 104a reports the story of Rav Yehuda Hanasi, the redactor of the Mishnah, who suffered from what is described as a severe terminal gastrointestinal disease. His condition was so poor that it was only the constant prayers of his disciples that was keeping him alive. Rebbe had a maidservant who was considered to be very pious. When she saw how much Rebbe physically suffered from his disease she prayed that the angels of heaven who deal with death would overpower the angels of earth mustered by the prayers of Rebbe's talmidim to protect him from death. Her prayers initially did not work because Rebbe's multitude of students prayed fervently that he should live. The maidservant then took a heavy clay urn and threw it on the floor shattering it completely and generating a great sound. The loud noise so startled the students that they momentarily stopped praying allowing the soul of Rebbe to depart to its eternal rest.

The Ran, Rabbeinu Nissim, a 13th century authority, states that it is both permissible and praiseworthy to pray for the death of a patient who is gravely ill and in extreme pain. Furthermore, the Gemara in Taanit 23a recounts the story of Choni Hamagil, the preeminent talmid chochom of his era, who fell asleep for 70 years. Upon awakening from his long slumber he had become a forgotten man and was not given his due honor even when entering his old bais hamedrash. He was

so psychologically pained that he prayed for his own death, and it was granted. These episodes clearly demonstrate that in the face of physical or mental suffering, there are appropriate times to pray for someone to die quickly, a lesson that contradicts the concept of requiring the extension of life at all costs.

There are Distinct Stages in the Definition of "End of Life".

The generic expression "end of life" is too broad and vague to be helpful in making halachic decisions. At the extreme state is a *goses*, an individual whose life and soul is just about to depart the body, and for which no medical therapy is appropriate as interventions for a goses are prohibited lest one prematurely snuff out his life. Rav Moshe Tendler quotes his father-in-law, Rav Moshe Feinstein, as defining a goses as a person who is in extremis and cannot survive more than three days. 1,2,3 In contemporary times, it is quite difficult to identify exactly who should be characterized as a goses, given the fact that so many critically ill people are maintained on respirators, intravenous drugs and fluids, and sometimes on cardiac assist devices. The definition does imply irreversible death which cannot bet prolonged by artificial means. In any case, we need not deal with this category in depth as the controversies in end of life care primarily deal with the pre-goses state.

More relevant is the state often analogized to a treifah. A treifah animal is one which is not expected to survive more than one year. A human treifah is a person who is alive but dying.⁴ A treifah is the concept that defines terminal illness today.⁵ Many halachic questions related to the permissibility

¹ Tendler, M.D. Responsa of Rav Moshe Feinstein Vol. I Care of the critically ill, KTAV, Hoboken, NJ 1996

² Iggrot Moshe, Choshen Mishpat Vol.2 75:5

³ Perisha, Yoreh Deah 339:5

⁴ Rambam, Mishneh Torah, Issurei Bi'ah 1:1

⁵ Steinberg A: Encyclopedia of Jewsih Medical Ethics. 2003 Vol. 3, pg.1046, Feldheim, Jerusalem.

of high risk surgery depend on whether a person is in the treifah state. Some poskim believe that in humans, one should be classified as a treifah only if expected to live for less than six months while others maintain that a treifah for humans is also 12 months. ^{6,7} This dichotomy of opinion is dependent on the definition of a human treifah. The Rambam opines that the definition varies over time periods, depending on the medical expertise of the generation. ⁸ Others disagree with this position. ⁹ In either case, the relevant issue relates to a person with a defined terminal illness who is not expected to survive in the long term despite therapy. So we will define a terminal condition as one that is irreversible, incurable and will directly and rapidly cause the patient's demise.

One final concept is that of medical futility. This is defined as an exceedingly small likelihood that a specific intervention such as chemotherapy or surgery will benefit the patient. To be more specific, it means that the treatment is highly unlikely to either extend the person's life or make her or him feel better. Since the goal of medicine is to help the sick and not to provide treatments that do not benefit patients, it is important for physicians confronting patients with terminal illnesses at the end of life to consider whether specific treatments are futile.

What Medical Services are Required for the Terminal Patient?

Although secular medical ethicists have discussed a broad range of medical therapies felt to be unnecessary or inappropriate for the dying patient, Halacha takes a more proscriptive view. In 1995 four giants of Torah in Israel published a list of mandatory treatments for the terminally ill. These included intravenous or gastric feeding tube nutrition, intravenous fluid replacement, insulin therapy if needed, controlled

⁶ Iggrot Moshe, Choshen Mishpat Vol. 2 75:2

⁷ Chochmat Shlomo Yoreh Deah 155:1

⁸ Rambam, Hilchot Rotzeach 2:8

⁹ Hazon Ish, Even Haezer, Hilchot Ishut 26:3

doses of morphine for pain relief, antibiotics as needed and blood transfusions if needed. The Rabbis were Joseph Shalom Eliashev, Shlomo Zalman Auerbach, Shmuel HaLevi Wozner, and S.Y. Nissim Karelitz.¹⁰ Similarly, Rabbi Moshe Feinstein states that even for terminally ill patients there is a clear cut benefit of nutrition and in the absence of contraindications, the patient should be given intravenous feeding.¹¹

Secular ethicists and many physicians are against the use of feeding tubes in dying patients or those with advanced dementia marshaling evidence that their use is not clearly associated with increased survival and may promote serious adverse consequences such as aspiration and subsequent pneumonia. From a halachic perspective these arguments are not relevant given the rulings above, and patient families have the right to demand their use unless absolutely contraindicated. While IV hydration and nutrition might be preferred in the short term, the ability to maintain long term intravenous access is frequently limited due to difficulties in keeping veins patent. Thus, a feeding tube may become necessary.

The Talmud itself may hint at the concept of a feeding tube. When Rabban Yohanan ben Zakkai was negotiating with the Roman Emperor Vespasian, he said to him, "Give me Yavneh and its sages, the chain of Rabban Gamliel, and doctors to cure Rabbi Zadok.¹²" Rav Zadok had fasted extensively for 40 years to stave off the destruction of Jerusalem and became deathly ill with contraction and shriveling of his intestines. The Talmud suggests that the care for Rav Zadok was a process of graduated feeding from liquids to semisolids akin to what we now do with feeding tubes.

Rabbinic Opinions Regarding Aggressive Therapy for Terminally Ill Patients

Consistent with the introductory themes of "doing ev-

¹⁰ Yated Ne'eman 29 Kisley 5755

¹¹ Iggrot Moshe, Choshen Mishpat II:74, 1984.

¹² Gittin 56b

erything" versus "not", there is a broad diversity of contemporary rabbinic opinions as to the general theme of aggressive therapy. We will deal with some of these major opinions before focusing on specific therapies.

In the "do everything" camp, most prominently, is Rabbi Eliezer Waldenberg, a giant posek in medical halacha, who opined that the physician must try to extend life and treat all patients even in the face of physical suffering and even if the patient refuses treatment.¹³

Opposing this somewhat lone view are the positions of other Gedolei Yisroel. Notably, Rabbis Y.S. Eliashev, S.Z Auerbach, and M. Feinstein. As an example, Rav Eliashev is quoted that if a terminally ill patient is suffering terrible anguish and requests that his life not be extended by treatments that increase his suffering, it is permitted to withhold life prolonging treatment, and there is no prohibition to not extending life in these circumstances.¹⁴

Rav Auerbach states that "in terminal states of illness, there is no requirement to take measures to extend this period and cause further pain and suffering."¹⁵

Controversial Issues in End of Life Care

Do not resuscitate (DNR) - Before undertaking a discussion of this topic, it is appropriate to define it. DNR means do not perform cardiopulmonary resuscitation. CPR is undertaken when a patient's heart stops or he or she stops breathing. In the setting of a healthcare facility, the procedure entails a doctor or nurse compressing the patient's chest by at least 2 inches at a rate of 100 compressions a minute in order to externally compress the heart and maintain blood flow to the brain and other tissues. Simultaneously, the patient needs to be given a source of oxygen, either through breaths into the mouth or

¹³ Tzitz Eliezer Vol. 5 Ramat Rachel #288

¹⁴ Abraham A.A.,Nishmat Avraham Part 4, Yoreh Deah 339.2 Artscroll , NY.2003

¹⁵ Op. cit. and Minchat Shlomo No. 91,sec 24

via a compressible bag connected to oxygen. These measures alone are rarely successful so they must be supplemented by intravenous drugs and an externally administered electric shock to the heart, termed defibrillation, or in the case of a respiratory arrest, connection of the patient to a mechanical ventilation machine, a respirator. CPR is continued until the patient either resumes having a heartbeat and pulse or, if the procedure is unsuccessful, the patient is declared dead.

CPR has about a 5% chance of survival in elderly patients and an even lower success rate in the terminally ill. CPR can cause rib fractures and those few who survive are often left with severe and irreversible neurologic damage. A recent meta-analysis that amalgamated data from 47 separate studies that reported survival to discharge in hospitalized adult cancer patients involving 1707 patients who underwent CPR found that in patients with metastatic disease, there was a 5.6% success rate of CPR. These included rates of 3.4% for patients with lymphoma and less than 1% for those with leukemia. The series of the survival in elderly patients and an even lower survival in elderly patients.

Taken together, these studies show a very low rate of success of CPR in terminally ill patients coupled with a high risk of irreversible brain damage in those who do survive. These medical facts should inform halachic decisions to either allow a "Do not resuscitate" order on a specific patient or mandate that CPR be performed.

In halachic discussions of DNR, it is accepted by many that CPR may be withheld from or refused by Jewish patients who are terminally ill when the patient states his or her wishes. Similarly, in the appropriate circumstance, to be determined by a qualified Orthodox rabbi, it is permissible to with-

¹⁶ Kinzbrunner BM: Jewish Medical Ethics and End-of-Life Care; J Palliative Med 2004; Vol 7, No.4, p558-573

¹⁷ Reisfield GM, Wallace SK, Munsell MF, Wenn FJ, Alvarez ER, Wilson GR: Survival in cancer patients undergoing in-hospital cardiopulmonary resuscitation: A meta-analysis. J Resuscitation, 2006 71:152-160.

¹⁸ Schostak Z: Ethical guidelines for the treatment of the dying elderly. J Halacha Contemp Soc 1991, Fall:XII, 62-86. Quotes opinion of Rav Shlomo Zalman Auerbach, cited by A.S. Abraham in Halachah Urefuah 2:189

hold CPR and attachment of a patient to a respirator in the case of terminal illness. 19.20

Do Not Intubate (DNI)-This order differs from DNR in that it applies to individuals who have a normal heartbeat but cannot breathe on their own sufficiently well to maintain a normal oxygen level in the blood. Examples of patients and diagnoses to which this applies include terminal patients who develop overwhelming pneumonia or massive pulmonary embolism, patients with terminal emphysema and patients with amyotrophic lateral sclerosis (ALS). The latter condition is a tragic neurologic disorder in which patients progressively lose all of their muscle activity, including that of the respiratory muscles required for breathing, while maintaining full cognitive ability. Once they can no longer breathe on their own, patients must be placed on a respirator or else they will die. As the disease is incurable, once on the respirator, they can last for years and years, totally paralyzed and unable to communicate despite have full mental capacity.

Several poskim rule that it is permissible to withhold connecting a patient with ALS to a respirator if that is his or her wish because of the profound suffering he or she will experience for many years. This approach is held by Rabbis S.Z. Auerbach, Y.S. Eliashev and I. Lau.²¹

If a terminal patient has a treatable pneumonia in which it is appropriate to treat that pneumonia or a case of likely reversible congestive heart failure (fluid in the lungs), and the patient needs a respirator to tide him or her over till the pulmonary process is cleared (see use of antibiotics), then a DNI is not appropriate.

Blood transfusions-Most poskim require blood transfusions as needed for terminally ill patients. Rav Moshe Feinstein explained that the transfused red blood cells aid in oxy-

¹⁹ Steinberg A: Encyclopedia of Jewsih Medical Ethics. 2003 Vol. 3, pg.1058, Feldheim, Jerusalem.

²⁰ Iggrot Moshe, Choshen Mishpat, Vol. 7, 74:1

²¹ Nishamat Avraham Part 4, Yoreh Deah 339:2

genation and can make the patient more comfortable. If the patient is in deep permanent coma or clinically brain dead, then transfusions may not be necessary.

Removal from a Respirator-In general, only withholding life prolonging interventions is permitted by Halacha. It is forbidden to withdraw therapy already started because stopping therapy is considered the performance of an action while withholding therapy is considered a passive non-action. Most Rabbis rule that it is never permissible to disconnect a patient from a respirator if that is what is needed to maintain life.²²

Rav Moshe Feinstein in a novel position states that if a respirator needs to be serviced or if the patient needs to be removed from the respirator for a minute or so to suction out respiratory secretions, then there is no requirement to reconnect the respirator if medical observation ascertains that the patient is not breathing spontaneously.²³ This position led to the development of integrated timers on respirators that were developed in Israel to allow temporary automatic shutoff to ascertain whether a patient is capable of spontaneous breathing. Modern day respirators no longer need to be disconnected to allow for suctioning.

With regard to initially connecting a terminally ill patient to a respirator, that issue will be dealt with in the section on general principles. Special note must be given for the patient with amyotrophic lateral sclerosis (ALS). This terrible disease causes complete muscle paralysis, eventually affecting the respiratory muscles, while maintaining the patient's brain function completely intact. Eventually, they cannot breathe on their own and are forced to decide whether to go on to a respirator and live the rest of their life completely paralyzed, unable to communicate and respirator dependent while being fully cognizant of the world around them. Most patients elect not to go onto a respirator and face decades of total paralysis and incredible suffering, choosing instead hospice care during

²² Tzitz Eliezer Part #17 #72:13

²³ Iggrot Moshe Yoreh Deah Part 3 #132.

the terminal stages of their disease. Whether this is allowable under Halacha is controversial. Dr. Abraham S. Abraham cites a discussion he had with RavAuerbach in which Rav Auerbach allowed a patient with ALS to refuse ventilator treatment.²⁴ Needless to say, such a decision requires close consultation with a sensitive and highly experienced posek in medical affairs.

Dialysis-Dialysis is indicated in the face of kidney failure that is so severe that the patient will die without it. As the risk of initiating dialysis is relatively small then if the patient is not otherwise suffering from pain, it is appropriate to provide this treatment. This is especially relevant to provide emotional support so that the patient does not feel neglected.²⁵Naturally, if the patient is a goses, then it is prohibited to provide such an intervention.

According to Rav Moshe Feinstein, in his discussion of pneumonia treatment, "If the terminally ill patient is in great pain, and he would prefer to die rather than continue living under these conditions, it may well be proper not to treat him in any manner that would prolong the dying process. This means it might be best to withhold treatment for the second illness, since if the pneumonia is cured, it would impose on the patient the burden of his first disease, for which relief is not available. ²⁶ The same reasoning would apply to initiating dialysis.

Rav Moshe continues: This is a decision which the patient must make. When the patient is incompetent, his family must be consulted since the mitzvah "to heal" initially falls on the family. However, the family's authority is not absolute. It is subservient to medical opinion.²⁷

Antibiotics- Antibiotics are one of the several items that the four Israeli Gedolim require in terminally ill patients.²⁸ In the case of a patient who is suffering from great pain, Rav

²⁴ Nishamat Avraham, Yoreh Deah 339:2

²⁵ Iggrot Moshe Choshen Mishpat II:74 (1984)

²⁶ Loc. cit

²⁷ Loc. Cit.

²⁸ Yated Ne'eman op.cit.

Moshe Feinstein's dictate in the case of pneumonia would apply and antibiotics could be withheld.

Chemotherapy- This is a nuanced topic both from a medical as well as halachic perspective. Cancer chemotherapy as well as radiotherapy and biologic therapy is given in one of three settings. It may be given as adjuvant therapy in association with surgery to prevent recurrences of the cancer. This is always halachically appropriate when medically indicated. It may be given for curative purposes, again always halachically appropriate. Finally, it may be given to terminally ill patients for palliation. In the latter case, the therapy might be prescribed to effect tumor shrinkage which can make a patient feel better and possibly prolong life, but rarely so. Alternatively, oncologists may "prescribe "so called palliative chemotherapy" even when it is not expected to work, but merely to give the appearance of "doing something". This is often demanded by families. Some Rabbis require disease specific medications to be given to a terminally ill patient, even if the treatment cannot cure him.²⁹ According to Rav Moshe Feinstein, one should not give these medications because they are of no help, but only prolong the life of suffering.³⁰ In deciding between these two opposing opinions, one need take into account how much additional suffering the futile chemotherapy will cause. If the therapy will cause increased suffering in the face of medical futility, it probably should not be given. Yet, if the chemotherapy is not expected to prolong the patient's life beyond twelve months it would be the patient's choice as to whether to accept palliative chemotherapy, assuming he or she is capable of making that choice.

A recent study from the Dana Farber Cancer Institute of Harvard University and Cornell University Medical College involved 386 terminally ill cancer patients. They entered a study in which about half elected to have chemotherapy that was limited to palliation with no expectation of cure or im-

²⁹ Rabbi B.P. Toledano Barkai Vol. 4, 5747 pp 428

provement and half elected to have palliative care with no chemotherapy. The average time to death was about four months and there was no difference in overall survival between patients receiving palliative chemotherapy and those who were not. The use of palliative chemotherapy was actually associated with an increased risk of dying in an intensive care unit, a decreased risk of dying at home, and a lower likelihood that patients died in their preferred place.³¹ This gives further support that palliative chemotherapy is usually not helpful and therefore not indicated, especially if it is highly toxic and will increase the patient's suffering.

It should be noted that newer biologic agents, including gene based therapies, are becoming available as part of clinical trials and eventually will become FDA approved for treatment. As these newer agents may both extend and improve life, even if not curative, they may eventually be widely recommended for palliative therapy and would then be halachically appropriate.

Surgery-A nuanced view of the subject of surgery for terminally ill patients is also required. Some procedures may be performed to make a patient more comfortable or even to alleviate acute pain. These are almost always sanctioned as they improve the patient's quality of life, sometimes immediately. The controversial issue revolves around risky surgery that may extend life but may be so dangerous as to pose an imminent danger for survival. Here, Rav Moshe Feinstein once again provides a rational approach which is relevant to both risky surgery as well a high risk medical therapy. He states that for a patient who would not survive a year if untreated, but the treatment involves a significant risk, then it is permissible to assume a large risk in order to achieve a cure if death would be certain without the treatment. "However, if the treatment will only prolong life for only a few months and not for a full year while the patient may die immediately because of the treat-

³¹ Wright AA, Zhang B, Keating NL, Weeks JC, Progerson HG: Associations between palliative chemotherapy and adult cancer patients' end of life care and place of death:prospective cohort study BMJ 2014;348:1219.

ment's toxicity, I believe it is forbidden to undertake such a course of treatment."³²

Narcotics for pain relief-Medication may be chosen to obtain the maximum comfort for terminally ill patients with intractable pain even if it renders the patient less responsive.³³ While there may be a fear that high dose narcotics may cause a patient to stop breathing, this can usually be mitigated by adding small incremental doses which are designed to achieve pain relief rather than respiratory depression. Using this approach, even if death ensues, no criminal act has been done.

Definition of Hospice and Palliative Care

Hospice is a home or hospital established to relieve the physical and emotional suffering of the dying. Although special hospitals for the terminally ill had existed prior to the 20th century, it was not until after World War II that recognition of the special needs of the dying led to the modern hospice movement. Cicely Saunders, one of the initiators of the movement and the founder of St. Christopher's Hospice, London (1967), and other health professionals recognized that many established procedures of modern medical care could be inappropriate when applied to those who are dying. The aggressive life-prolonging measures routinely taken in intensive-care units often only increased the discomfort and isolation of terminally ill patients and deprived them of the opportunity to die in a peaceful and dignified fashion. In response to the absence in the medical system of provisions for the supportive care of this class of patients, the modern hospice was developed.

The hospice functions as a sympathetic and reassuring environment dedicated to making the last days of the dying as pleasant as possible. The prevention of physical pain is the

³² Iggrot Moshe, Choshen Mishpat II:75 (1984)

³³ Loike J, Gillick M, Mayer S, Prager K, Simon JR, Steinberg A, Tendler MD, Willig M, and Fischbach RL: The critical role of religion: Caring for the dying patient from the orthodox Jewish perspective. J Pall Medicine:13(10) 1-5, 2010.

first priority, and analgesics, tranquilizers, and physical therapy are used to alleviate physical suffering. Hospices emphasize the prevention, rather than the mere control, of pain through vigilant monitoring and by the tailoring of drugs and their dosages to patients' individual needs. Patients in hospices receive moral support from loved ones as well as the staff itself, and a variety of measures are used to further their emotional and spiritual well-being.

Patients are usually admitted to a hospice on referral by a physician after a prognosis for survival of only months or weeks. Care may be provided completely within a health facility, on an outpatient basis, or at home.³⁴

Palliative care, on the other hand, seeks to improve the quality of life of patients with terminal disease through the prevention and relief of suffering. It is facilitated by the early identification of life-threatening disease and by the treatment of pain and disease-associated problems, including those that are physical, psychological, social, or spiritual in nature. Palliative care is also sometimes described as hospice, but is a more general approach. While *hospice care* does imply palliative care, it is specific to care provided near the end of life. In contrast, palliative care covers the duration of a patient's illness and, hence, may be delivered over the course of years.³⁵

Home versus Inpatient Hospice

For patients who can be managed at home by family and with help, hospice services can be provided to allow a patient to live his or her final days at home and to die at home. This is often a patient preference. The hospice organization will work together with the patient's physician and provide skilled nursing visits, management of pain medication and social work consultation. The assigned case manager can also

^{34 &}quot;hospice." Encyclopaedia Britannica. Encyclopaedia Britannica Online Academic Edition. Encyclopædia Britannica Inc., 2014.

^{35 &}quot;palliative care." Encyclopaedia Britannica. Encyclopaedia Britannica Online Academic Edition. Encyclopædia Britannica Inc., 2014

facilitate transfer to inpatient hospice if needed. For most of the day, though, there are no hospice personnel present within the home. The major advantages of home hospice care is the comprehensive management of pain and social service needs. It is important to appreciate that while Medicare will pay for all aspects of home hospice care, it will not cover chemotherapy or other drugs to treat the underlying illness once the patient chooses to receive hospice care. As such, all decisions and discussions as to the appropriateness of not continuing palliative chemotherapy and the like must be made before choosing hospice. One can, however, reverse one's decision and change back from Medicare for hospice to standard Medicare which will pay for illness therapy.

In patient hospice provides 24/7 skilled nursing care and an on-site physician supervision for patients who are both terminal and too sick to be managed at home without 24 hour a day care. The impatient hospice also provides comprehensive pain management but supplements this with round the clock nursing care, I.V. hydration, oxygen, transfusions, antibiotics and bed sore prevention.

The Challenges of Hospice for the Orthodox

Many orthodox Jews are repelled by the thought of hospice for a variety of reasons. There are concerns that some hospice care organizations may not respect the halachic wishes of the patient or family and literally offer no treatment other than pain relief. Other concerns relate to the patient not being told of his or her diagnosis so the family is thus reluctant to refer the patient to hospice. The first concern does have a basis in reality as there are certain hospice organizations that are philosophically committed to a distinct type of restricted care. The challenge, then, is to find an organization that will totally respect the family's wishes. These institutions do exist. As to the concern of not telling the patient, in my experience, that situation is usually a fiction created by the family with good intentions as they try to save the patent from depression. In reality,

when someone is racked with pain, is losing weight rapidly and is too weak to perform everyday tasks, they know absolutely that something is terribly wrong. It may be much more kind to inform the patient and then make his or her remaining time more meaningful with expressions of sympathy and love, having friends visit to comfort. It enables one to confront the real problems of the terminally ill such as pain relief and non-specific terror that they experience from not knowing why they are so sick. In addition, knowing their diagnosis allows them to become meaningfully involved in future planning such as creating or updating wills and making their wishes known to spouse and children.

Why Hospice Care is So Important

There are many real life needs of the terminally ill patent that may be best served in a hospice setting, once the patient reaches the end of life stage of weeks before anticipated death. These include the obvious needs for oxygen, expert pain relief and feeding. Equally important, though, are those services which usually cannot be adequately provided at home such as body cleansing and bathroom aid, frequent turning to prevent bed sores, and the numerous manipulations that are difficult or impossible because of the need to maintain kibud av v'aim with its many halachic implications. The hospice environment provides all of these in a peaceful, not cramped, comfortable setting. It is virtually impossible for most families to provide a truly high level of end of life care at home because of limitations of space, facilities and finances. Both Medicare and Medicaid as well as commercial insurance and long term care pay generously for hospice care. It is the family's responsibility to insure that a chosen hospice will cooperate fully with the family in their wishes to provide halachically appropriate hospice care.

Caveats in Defining Halachically Appropriate End of Life Care

It goes without saying that the first step in deciding whether and how to seek hospice care needs to start with a consultation with an Orthodox Rabbi who is expert in the halachos of end of life care. It is appropriate to begin to discuss matters with one's congregational Rabbi who may or may not be such an expert, but who will certainly be involved in pastoral care and may actually work together with the halachic expert to provide day to day guidance.

Next, it is critical, if at all possible, to discuss substantive questions with the patent himself or herself. It is actually the patient's wishes with regard to therapy that are most important both halachically and from a secular ethical perspective. Their written or verbal explicit wishes should be obtained and, if possible, legally binding advanced directives and health care proxy should be completed. Sometimes, these forms are somewhat restrictive and may not address the nuanced wishes of the patient. In such cases, it might be helpful for the patient to dictate a letter and sign it in the presence of witnesses to establish a richer, but legally binding set of directives. From a halachic perspective there may be unique circumstances when the patient's wishes may not be halachically acceptable, thus emphasizing the need for consultation with rabbinic authorities well versed in these issues.

If hospice care is planned, then the family should discuss their specific wishes, developed in consultation with the patient and their rabbinic posek, with the hospice organization. The discussions must include DNR/DNI, feeding, hydration, antibiotics and transfusions. In most cases, the hospice will respect the family's wishes and it is the family's responsibility to insist on these halachically mandated requirements. These discussions must be undertaken before the final choice of a hospice organization to insure its agreement. If the patient has been hospitalized and cannot make it to hospice care, then the family should have the exact same conversation with the

treating medical staff of the hospital to insure an orderly end according to Halacha and the family's wishes.

It is instructive to end with a long quote on the topic from one of the generation's greatest and sympathetic halachic decisors, Rav Moshe Feinstein. In a teshuva asking whether there are patients who should not be treated so as to prolong their lives for a little while he states:" With regard to a terminally ill patient who can live for several weeks or months, such patents often should not be treated. In cases of intractable pain, we have clear instructions from the account of the death of Rebbe, where the Talmud records that the action of the maid servant were right and proper. Furthermore, the Ran in Nedarim 40a states that "it is sometimes proper to pray to Hashem for the death of a critically ill person if he is suffering greatly and there is no rational hope that he will recover." Rav Moshe then rules for such a patent who has no hopes of surviving free of pain, but it is possible, by medical methods to prolong his life, then it is improper to do so. Rather, the patent should be made as comfortable as possible, and left without any further intervention. I must emphasize that it is absolutely forbidden to do anything or to provide any drug that will shorten the patient's life, for even a moment. If it is possible to provide drugs that will make the patent comfortable so that he will not be in pain, then efforts should be made to prevent the patent from dying."36Those efforts, as previously stated, include oxygen, feeding and hydration.

This perspective, I believe, provides an appropriate balance between maintaining the sanctity of life, being sensitive to human suffering and providing the most respectful end of life care all under the umbrella of halacha.

An Orthodox Jewish Approach To Hospice Care

Acknowledgements: This article was first published in the Journal of Halacha and Contemporary Society, Number LXIX and reprinted here with permission. I am personally indebted to Rav Moshe Faskowitz, Rosh Yeshiva of Yeshiva Madreigas Haadam, and Rabbi Dr. Edward Reichman, Professor of Emergency Medicine at the Albert Einstein College of Medicine, for review of this manuscript and their valuable comments. Rabbi Mordechai Willig, Rosh Yeshiva at the Rabbi Isaac Elchanan Theological Seminary and Rabbi Dr. Sol Roth Professor in Talmud and Contemporary Halacha at Yeshiva University, diligently reviewed the entire manuscript for its content and supported its publication.

Hemophilia and Circumcision From Observation to Classification: Connecting a Talmudic Presumption to a Modern Diagnosis

DANIEL EISENBERG, MD

The mitzvah of circumcision, *brit milah*, is one of the hallmarks of the Jewish People, and its performance has been observed meticulously over the millennia, often at great sacrifice. Only a serious danger to the life of the infant due to performance of a *brit* would lead halakhic authorities to forbid the procedure. Lacking the sophisticated diagnostic tools of modern medicine, the rabbis of past centuries had to depend on simple but careful clinical observations. Their clinical laymen's conclusions have subsequently been clarified and understood precisely from a medical point of view.

In this paper, we will examine the specific observations and conclusions of *Chazal* and the impact that changes in medical information may have on these halakhic decisions. In the course of this discussion we will address a question with broader implications: Can the advancement of medical knowledge modify the application of a Talmudic presumption and possibly nullify a prohibition?

A Talmudic Mystery

The Talmud teaches that if a woman had two or three sons who died from circumcision, subsequent boys should not be circumcised due to a *hazakah* (presumption) that future boys will also die:

If a woman had her first son circumcised and he died, and she had the second one circumcised and he died, she should not have the third son circumcised. These are the words of R. Yehudah Ha-Nasi. R. Shimon ben Gamliel, however, said: She may circumcise the third son, but must not circumcise the fourth son. ¹

The Talmud then makes a similar presumption regarding the sons of several sisters:

It once happened with four sisters from Tzippori that the first had her son circumcised and he died, the second sister had her son circumcised and he died, the third sister had her son circumcised and he also died, and the fourth sister came before R. Shimon ben Gamliel and he told her: You must not circumcise your son. Perhaps if the third sister had come [to R. Shimon ben Gamliel] he would have ruled the same? If so, why did R. Chiya bar Abba bother to recount the story? Perhaps R. Chiya bar Abba was teaching us that events occurring to sisters

1 Yevamot 64b. Hazakah is a very important halakhic concept. We accept a presumption that an event will occur again because it has occurred a sufficient number of times for us to believe that it will continue to happen. Jewish law treats hazakah as fact unless there is some evidence to suggest that the presumption is not valid. But how many times must an event occur for us to presume that it will continue to occur? R. Yehudah Ha-Nasi argues that two unusual occurrences create a hazakah, whereas R. Shimon ben Gamliel argues that three events are necessary. The question of whether two or three events create a presumption is the topic of the Talmud's discussion in this context: How many instances must occur before we establish a hazakah that a woman's sons die from circumcision (rather than as a result of random and unrelated events), and therefore forbid the circumcision of any subsequent son. In cases of potential danger, the standard assumption is that two events create a presumption (Beit Yosef, YD 263:2; Rambam, Hilkhot Milah 1:18).

can create a hazakah.2

The reason the rabbis even consider the concept of *hazakah* in these cases is because death from circumcision is a very rare occurrence in any individual case, so the possibility of some familial abnormality is certainly raised when several sons from the same family die from the procedure.

Does it matter why the sons died from circumcision? Is there any information that we might seek that would make it possible to exclude a subsequent son from this presumption? Perhaps the rabbis recognized a medical condition without a name that caused babies to die from circumcision that we could identify as the underlying reason for the *hazakah*. If so, would the *hazakah* be null and void if we were to determine that a subsequent son did not have that disorder?

What did the Rabbis See?

From the brief Talmudic debate, we can glean a number of details that might point towards a diagnosis. The early commentaries clearly indicate that the Talmud is dealing with a condition that only affects several boys from one mother or one boy each from several sisters. Most commentators note that the boys must be the offspring of the same mother, even if there were different fathers. If they were the offspring of the same father but different mothers, then most Rishonim (early medieval commentators) rule that there is no presumption that circumcision would be dangerous for future boys. For instance, the medieval Talmudic commenta-

² Ibid.

³ While the Talmud cites the case of several sisters, each of whom had a son that died from circumcision, no such case is brought regarding the sons of brothers. As Rashi writes (*Yevamot* 64b, s.v. *d'achayot machzekot*): "Just as the woman herself creates a *hazakah* on herself with three occurrences, so too one occurrence to each of three sisters creates a *hazakah* on each sister." 4 Rambam, *Hilkhot Milah* 1:18; Tur, YD 263; Shulhan Arukh, YD 263. The Shulhan Arukh also includes the case of different mothers, as will be discussed below.

tor R. Menahem Ha-Meiri specifically states that our discussion only applies to the mother and the sisters "because the issue is in the woman."⁵

The notable exception is the late 13th/early 14th century commentator Rabbeinu Manoah, who applies the *hazakah* also to the sons of the same father and different mothers. Since Jewish law almost always errs on the side of caution with respect to danger to life, some other authorities, such as *Beit Yosef*, include offspring of the same father and different mothers in the *hazakah* – not necessarily because they believe this view to be correct, but in order to take into account the minority opinion of Rabbenu Manoah.

Are there any indications as to the nature of the condition that the rabbis are addressing? The Talmud records the deaths without explaining their specific cause, but we are left with a few clues as to the etiology of the deaths. At the end of the discussion regarding brothers dying of circumcision, the Talmud suggests that the condition is related to a blood abnormality: "The *hazakah* concerning death from circumcision makes sense, since there are some families with thin [lit. loose] blood and some families with thick blood."8

Thus, the disorder in question is clearly a hematological condition that affects boys, but it is caused by a prob-

⁵ Meiri, Yevamot 64b.

⁶ For a possible explanation of the reason for Rabbeinu Manoah's ruling, see n. 11 below.

⁷ R. Yosef Karo, Beit Yosef, YD 263. R. Karo's final ruling in the Shulhan Arukh (YD 263:2) similarly incorporates the dissenting opinion that fears for the offspring of the same father and different mothers. However, in his gloss to R. Karo's ruling, R. Moshe Isserles (Rema) makes clear that the inclusion of different mothers has a questionable basis in Jewish law, but that we always err on the side of caution. As Rema writes: "And there are those who disagree and think that [the creation of this type of hazakah] does not apply to a man, but only to a woman (Hiddushei Agudah, Perek Rebbi Eliezer De-Milah), but it appears that in questionable danger to life we are lenient [to err on the side of caution])." See n. 17 below regarding the halakhic approach to situations of possible danger.

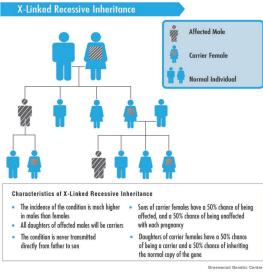


Figure 1
Used with permission

lem in the mother, and not in the father. There is a presumption that the underlying cause (but not the disease itself) may be found in sisters, but not in brothers, and in mothers, but not in fathers, and it potentially can cause the death of a child who is circumcised.

A Mystery Solved – Maybe!

At this point, it would appear that we may have an answer. An abnormality that is carried only by women but that strikes only boys is almost certainly an X-linked recessive condition (see figure 1). That the cause of death is due to a familial excessive bleeding disorder is clear from the Talmud and explicitly stated by at least one 14th century commentator. One of the total century commentator.

It is at this point that the keen analytic abilities of the rabbinic scholars become apparent. The Talmud's description seems to coincide precisely with the disease hemophilia.¹¹

⁹ Illustration from Genetic Counseling Aids (4th Edition, 2002); permission for use granted by Greenwood Genetic Center.

¹⁰ R. Avraham ben Yitzchak of Montpellier (*Avraham Min Ha-Har*), *Yevamot* 64b, s.v. *gabei milali*: "It is because of the family, for there are families whose children close to birth have thin/loose blood that is not absorbed into their limbs, and it all comes out if there is a small wound."

¹¹ While it is empirically the case that X-linked conditions such as hemophilia are carried by the unaffected mother, who contributes the X

The first modern description of hemophilia was recorded in 1803 by a Philadelphia physician named John Conrad Otto, who described "a hemorrhagic disposition existing in certain families." He recognized its hereditary nature and that it only affected males. Yet although this disorder was only given an official medical name in the 19th century, it is obvious that the earliest description of hemophilia A was much earlier – in Talmudic times, when diseases did not necessarily yet have names. In fact, medical

chromosome to the male offspring, the question of why the rabbis ascribed the cause of a hematologic abnormality to the mother alone – despite their lack of knowledge of modern genetics – is a matter of speculation. One possible explanation involves another Talmudic passage (*Niddah* 31a):

There are three partners in [the creation] of man: God, the father, and the mother. The father contributes the white [components], from which develop the bones, the sinews, the nails, the dura [lit. brain] of the skull, and the white of the eye. The mother contributes the red [components], from which develop the skin, the flesh, the hair, the black of the eye (the pupil)...

One version of this passage includes blood on the list of red components derived from the mother. Based on that version, the *Turei Zahav* (R. David Ha-Levi Segal, 1586-1667) and the Vilna Gaon (Elijah ben Shlomo Zalman Kremer, 1720-1797) comment that Rema attributes the creation of the *hazakah* "only to a woman" because "the blood comes from the mother." R. Moshe Feinstein (*Iggerot Moshe*, YD 1:154) utilizes the same source in discussing why some commentators (such as Rabbenu Manoah) include the third male offspring of a man from different mothers in the *hazakah*, speculating that the difference of opinion revolves around which text of the above quoted Talmudic passage a commentator possessed. Commentators who had the text that includes blood among the "red" components contributed by the mother ruled that the presumption of a hematological cause for a child's death from circumcision is inherited exclusively through the mother; those who had the text in which blood is not included concluded that the disorder can also be inherited from the father.

12 J.C. Otto, "An Account of An Hemorrhagic Disposition Existing in Certain Families," *Medical Repository* 6:1-4 (1803).

13 Hemophilia A and hemophilia B are both X-linked recessive conditions of various severities. In hemophilia A, factor XIII is lacking. In hemophilia B, a fairly rare disorder that appears to have been passed down by Queen Victoria to several royal families in Europe, factor IX is lacking. While both manifest predominantly as bleeding disorders, it is presumed that the

textbooks attribute the rabbis of the Talmud with the first recorded description of hemophilia A.¹⁴

However, a second Talmudic discussion seems to call into question our diagnosis of hemophilia. Hemophilia is an incurable disease; while clotting factors can be replaced when necessary, no child "outgrows" hemophilia. Yet one view cited in the Talmud permits the circumcision of a baby boy whose two brothers died of circumcision once his particular blood abnormality has abated!

What Did R. Natan See?

The Talmud describes two cases of specific hematological abnormalities in infants that require postponement of circumcision. One of the cases sounds very similar to our previously discussed case:

And Abbaye said: Mother told me regarding a baby that is red – that it is because its blood is not absorbed; wait for him until his blood is absorbed, and [only then] circumcise him. [If the baby is] *yarok* (yellow or green), then the reason is because his blood has not fallen into him [he

Talmud is discussing hemophilia A, since it is so much more common. However, both the presentation and Jewish legal ramifications would be the same for hemophilia B.

14 See R. Goodman, *Genetic Disorders Among the Jewish People* (Johns Hopkins University Press, 1979), 57. See also the descriptions of hemophilia A by the Canadian and United States Hemophilia Societies (http://www.hemophilia.ca/en/2.1.2.php):

Hemophilia was recognized, though not named, in ancient times. The Talmud, a collection of Jewish Rabbinical writings from the 2nd century AD, stated that male babies did not have to be circumcised if two brothers had already died from the procedure.

For a discussion of alternative diagnoses that may be included in the rulings of the Talmud and commentaries, see Fred Rosner, "Hemophilia in the Talmud and Rabbinic Writings," *Annals of Internal Medicine* 70 (1969): 833-7, and A. Steinberg, *Encyclopedia of Jewish Medical Ethics* (Feldheim Publishers, 2003), 208-9.

is anemic]; wait until his blood falls in [he is full blooded], and then circumcise him. For we learn in a *baraita*: Thus said R. Natan: One time I was traveling to the seaside villages and a woman came before me who had circumcised her first son and he died, [she circumcised her] second son and he died, and she brought the third [son] before me. I saw that he was red and I said to her: Wait on him [to circumcise him] until his blood is absorbed. She waited until his blood was absorbed and circumcised him, and he lived. And they called him Natan the Babylonian after me.¹⁵

A key question arises from this narrative. Why was R. Natan willing to circumcise the third child at all? If the death of two sons creates the presumption that subsequent sons will die from circumcision, he should have forbidden circumcision regardless of the condition of the third son! We see from here that despite the initial ruling that once a *hazakah* is created no succeeding sons could be circumcised, R. Natan was willing to allow circumcision when he understood the underlying reason for the first sons' deaths and he knew that the child in question was not affected. More importantly, R. Natan presumes that

¹⁵ The same narrative appears in *Shabbat* 134a and *Hullin* 47b.

¹⁶ See R. Yehezkel Ha-Levi Landau, *Noda Be-Yedudah*, *Mehadura Tenyana*, YD 165 (and gloss from the author's son). *Noda Be-Yehudah* is uncomfortable with the ruling of Rambam (as well as those of the *Tur*, *Shulhan Arukh*, and *Nimukei Yosef*) that circumcision of the third son of a woman whose first two sons died as a result of circumcision may be performed if it is first postponed to assure the health (literally strength) of the baby. *Noda Be-Yehudah* argues that based on *Yevamot* 64b there is no Talmudic basis for such a leniency, and he discusses at length R. Natan's justification for allowing circumcision of such a third son. Among the possibilities he entertains are:

Perhaps it was different in that case [of R. Natan]; since we saw in [that child] that his blood was not yet absorbed, we say that probably also the first children were red, but that they [the people who had examined the first two sons] did not take notice, for even regarding this third son it was [only] R. Natan who noticed the situation [that

the third son was red]. But for a woman who has her first and second sons circumcised and they had no signs of weakened strength [i.e., they appeared completely healthy] and they died, we say that there is a *hazakah* that her sons die because of circumcision and the third [son] should not be circumcised at all.

It is possible to say that perhaps R. Natan, who allowed circumcision [of the third son] after his blood was absorbed, concurred with R. Shimon ben Gamliel that [only] three occurrences create a *hazakah*. Therefore, he was not particular regarding the earlier deaths; only because this child's blood was not yet absorbed did he forbid circumcision in the proper time [on the eighth day], and thus he instructed to wait until his blood was absorbed.

[Alternatively, R. Natan agrees that a *hazakah* is created after two lethal events, but] we must conclude that because of the death of the first ones, he was concerned only that the [third son] not be circumcised on the eighth day, but after he became strong, it would be permitted [i.e., the Talmud in *Yevamot* is claiming that the *hazakah* that sons die because of circumcision applies only to circumcision performed on the eighth day]. When R. Natan directed that they wait, certainly he also warned that [the boy must] be healthy and strong [before circumcision is permitted]. For presumably, he did not allow circumcision the instant that he was no longer red, for presumably [the boy] was still weak since his blood was not absorbed until now.

In a footnote to this responsum, the author's son writes (based on Maharsha, *Hullin* 47b):

And according to this [explanation], one could say that R. Natan allowed circumcision of the third son after his blood was absorbed because there was no hazakah from the first two sons that they died from circumcision, but rather [they died] because they were [circumcised while still] red. But if there had been a hazakah that they died because of circumcision, without the [additional] reason that they were red, then we would say that there is a hazakah that they died [only] because of circumcision and that the third son should not be circumcised at all, as my father wrote. However, the words of Maharsha are difficult, since the key point is lacking. For the Talmud (Shabbat 134a) should have mentioned that the first two died because they were also red. So certainly, we must say that Tosofot understood that since R. Natan mentioned [that] the first [son was circumcised and] died and the second [son was circumcised and] died, that it comes to teach us that two occurrences create a hazakah. And even so, R. Natan permitted circumcision of the third son after his blood was absorbed, for he was not particular [he did not think that the hazakah applied except regarding circumcising [a red baby] in the proper time

the hematologic abnormality will resolve!

This concept is of great halakhic importance. R. Natan's recommendation to circumcise a child whose brothers died of circumcision once the medical contraindication has resolved strongly supports the thesis that we may evaluate at least some of the medical presumptions in the Talmud and disregard them if we know that their underlying cause does not apply to an individual case.¹⁷

This suggestion is strengthened by the ruling of Rambam regarding delaying circumcision in the cases discussed in the Talmud. While the Talmud states that subsequent sons should not be circumcised, Rambam – in a decision later codified unchanged by *Tur* and *Shulhan Arukh* – writes that their circumcisions should be postponed:

If a woman had her first son circumcised and he died because of the circumcision, which weakened his strength, and she also had her second son circumcised and he died as a result of the circumcision – whether the second son was from her first husband or from her second husband – she should not circumcise the third son on the eighth day. Rather, she should postpone it until he has grown and his strength is established. One may only circumcise a child who is totally free of illness, for danger to life overrides

[on the eighth day]. But after he is healthy, there is no longer a hazakah [i.e., the formerly red baby is no longer included in the hazakah] and it is permitted to circumcise, as my father, the great scholar and genius, ruled.

17 This idea must be very carefully applied, since the *Shulhan Arukh* (YD 116:5) states: "One should avoid all things that might lead to danger because a danger to life is stricter than a prohibition. One should be more concerned about a possible danger to life than a possible prohibition." Since Jewish law is more strict with issues of danger than issues of prohibition, when the rabbis of the Talmud have declared something to be dangerous, even if the reason is not known or confirmed empirically, the practical halakhic ruling is usually still concerned with the possibility of danger.

everything. It is possible to circumcise at a later time, but it is impossible to restore the life of a single soul of Israel forever.¹⁸

Other authorities are puzzled by Rambam's ruling to allow a subsequent son to be circumcised at all. What of the presumption that he will die from the circumcision? While it is possible that Rambam believed that the child would outgrow his "weakness," it is equally plausible that he is simply suggesting that we wait until the child has proven that he is healthy and therefore does not suffer from whatever undetectable condition caused the "weakness" in the siblings who had died.

A crucial distinction must be recognized to understand the apparent contradiction between the case in *Yevamot*, which categorically forbids subsequent circumcision of a boy whose brothers died of circumcision, and the cases in *Shabbat* in which R. Natan allows subsequent circumcision if the underlying hematologic abnormality is recognized and expected to resolve. It **must** be the case that, unlike the boys brought to R. Natan, who manifested visible signs of blood abnormalities, the boys in the first cases manifested **no** recognizable signs of a bleeding disorder (or any other significant illness) at birth; otherwise, it would have been forbidden to circumcise them even if they had no brothers or cousins who had died from circumcision.²⁰ As Rambam rules, it is universally accepted that a

¹⁸ Rambam, Hilkhot Milah 1:18

¹⁹ See F. Rosner, *The Medical Legacy of Moses Maimonides* (Ktav, 1998), 139-48; and idem, *Medicine in the Bible & the Talmud* (Augmented Edition, Ktav, 1995), 43-49.

²⁰ See *Beit Yosef*, YD 263:2: "A woman who had her first son circumcised and he died... And certainly we are dealing even with a case where there is no [recognizable] illness, since there is a family with thin/loose blood. For if there was any [visible] illness, why would we require three occurrences? Even if the child were the first [of the sons to be circumcised], the law would be the same [that circumcision would not be permitted due to illness]. And therefore Rambam and the Rav [*Tur*] write that 'he died because of the circumcision, which weakened his strength' – to say that there was absolutely no illness [recognizable] at the time of circumcision."

sick child may not be circumcised under any circumstances.

This distinction is implicit in Rambam's ruling, and we might suggest that Rambam combined the cases of *Yevamot* and *Shabbat* to create a single ruling that applies to both types of cases.²¹ It goes without saying that if the baby is visibly ill, he should not be circumcised. In cases such as those of R. Natan, in which the babies present visible signs of a hematological disorder, the circumcision is postponed; if those signs resolve, the child is no longer ill and may be circumcised.

But what of the cases in *Yevamot*, in which no abnormalities are present at birth, but two brothers have died from circumcision? How could Rambam possibly suggest allowing even a delayed circumcision if we are correct that the child has hemophilia, which never resolves?

The answer may be quite simple – on average, hemophilia affects only half of the male offspring of a woman who carries the gene (see fig. 1). Since the clotting abnormality may be expected to manifest from infancy if the baby suffers from severe or even moderate forms of hemophilia, the absence of the disease can be confirmed in early childhood if the boy grows up asymptomatically. While two previous siblings may have died from the disease in infancy after circumcision, there is still only a 50% chance that the next male child will be affected. Therefore, rules Rambam, we are to postpone the circumcision until "he has grown and his strength is established." In other words, wait until the child has grown and has not manifested the signs of hemophilia, for surely no child completely avoids even the mild injury that would clearly indicate a bleeding disorder.²² If

See also *Kesef Mishneh*, *Hilkhot Milah 1:18*, who comments that the case in *Yevamot* involves a baby with no symptoms, but when there is a presumption that the baby is from a family that has thin/loose blood, in which case timely circumcision will endanger the baby's life.

²¹ Shulhan Arukh (YD 263:2) rules similarly. While apparently conflating the cases in Yevamot and Shabbat, the Shulhan Arukh is likely applying the halakhah to both types of cases.

²² The degree of trauma necessary to cause a clinically important bleeding episode in a hemophiliac depends on the severity of the disease. A "cut" is

the child matures without signs of excessive bleeding (which would certainly occur if the child had hemophilia), then he is unaffected and may be safely circumcised.

It is logical that Maimonides ends his brief discussion of these cases with the words: "One may only circumcise a child who is totally free of illness, for danger to life overrides everything. It is possible to circumcise at a later time, but it is impossible to restore the life of a single soul of Israel forever." That is, one may only circumcise a child free of illness; if there are visible signs of a bleeding problem, the circumcision must be postponed until they resolve. And if there are no visible signs of a bleeding problem, but previous siblings died from bleeding during circumcision, one must wait until it is clear that each subsequent male sibling does not manifest signs of a bleeding disorder.

rarely a problem, since in this type of mild injury the hemostasis is achieved mainly by the action of platelets and vasoconstriction, which are generally unaffected in hemophilia. The symptoms of hemophilia are dependent on the level of activity of the clotting factor in question. Less than 1% activity will have classical symptoms. Less than 5% activity will have symptoms only in the face of significant trauma (such as tooth extraction). Patients with severe hemophilia fare the worst, with the common major symptom being intra-articular bleeding, causing a painful, crippling, and deforming condition.

It would be reasonable to expect that a child with severe or even moderate hemophilia would be recognizable as symptomatic at a very young age. Only those with the mild form might pose a barrier to recognition of the disorder in the growing child, unless challenged by a major physically traumatic episode. While it is not unusual for a child with mild hemophilia to go undiagnosed until age of 5-6, the cases in the Talmud which resulted in death would almost certainly have been at least moderate in severity. Therefore, it would be expected that a boy with such a compromised ability to clot would manifest very young.

For a description of the classification of hemophilia severity, see G.C. White, F. Rosendaal, L.M. Aledort, et al., "Definitions in Hemophilia: Recommendation of the Scientific Subcommittee on Factor VIII and Factor IX of the Scientific and Standardization Committee of the International Society on Thrombosis and Haemostasis," *Thromb Haemost* 85 (2001):560.

Halakhic Ramifications

There are two possible approaches to the Talmud's ruling in Yevamot regarding circumcision, each yielding different practical halakhah. We may reject the identification of a specific medical condition as the diagnosis in the Talmudic text and assert that while the cause for the hazakah was known to the early rabbis, it is by definition unknowable to us. Since we do not know the precise reason for the Talmudic presumption, we would be required to apply the ruling of the rabbis exactly as it had been recorded in the Talmud, with no exceptions. Were this the case, then once two sons have died from circumcision, no succeeding sons may have a circumcision, regardless of any specific medical information known about the child in question. This position would also imply that we may add no additional cases beyond the exact case presented in the Talmud. On the other hand, we may postulate that a hazakah is sometimes created by a set of circumstances that are potentially identifiable. We could assert that the rabbis were reacting to a phenomenon whose presence they could identify, but whose underlying cause they did not know. If this is the case, then if we can reliably identify the underlying cause of the presumption, then we may be able to understand in which situations the hazakah applies and in which situations it does not. We may be able to exclude some similar cases from the hazakah and broaden the application of the presumption to more cases than the specific set of circumstances described by the Talmud. A decision must be made between these two alternative interpretations because the ruling of the Talmud must be applied in the appropriate way. While sometimes the ruling derived from a given Talmudic case is the former restrictive approach, when the answer is deemed to be the latter approach, we are often able to elucidate the halakhah in much clearer terms. In light of the rulings of Rambam, Tur, and Shulhan Arukh noted previously, modern Jewish legal decisors take the latter approach, accepting the possibility of defining the illness and applying Jewish law with that understanding.

What is the halakhic significance of our contention that hemophilia is the mysterious hematological condition described in the Talmud? The practical application of our journey into the Talmudic mystery of the baby boys illustrates a basic rule in Jewish law: While halakhic principles are immutable, the application of *halakhah* to new medical knowledge may yield different practical outcomes.

If our identification of hemophilia as the blood abnormality of the Talmud is correct, then several practical applications should follow. Independent of the general prohibition of circumcising a sick baby, a child with known hemophilia should not be allowed to undergo circumcision regardless of any prior familial deaths from circumcision. Additionally, in a family of known hemophiliacs, even if prior babies have died from circumcision, a baby should be able to be circumcised on the eighth day, without waiting to see if he grows up to be healthy, if a blood test indicates normal blood coagulation.²³

Dr. Abraham Abraham states unequivocally that the case of the two boys who died after circumcision concerns hemophilia and clearly rules:

The blood in affected males cannot clot normally, and therefore bleeding will continue and can reach life-threatening proportions. Such a male can obviously not be circumcised until the defect is (albeit temporarily) treated. Diagnosis of the condition is fairly simple and the baby cannot be circumcised, even if his older brothers have been circumcised without any problem.²⁴

Dr. Fred Rosner presents a similar opinion of R. Moshe Feinstein:

For practical purposes, in this day of hematological sophistication, where antihemophiliac globulin (factor VIII) assays can establish the

²³ R. Shlomo Zalman Auerbach, as reported in A. Abraham, *Nishmat Avraham*, YD 263:2 (English edition, vol. 2, 206-7). 24 Ibid.

diagnosis of hemophilia at or shortly after birth, one is not permitted to circumcise any child so diagnosed even if he did not have older siblings who exsanguinated after this operation. A positive diagnosis established by the finding of low to absent antihemophilic globulin levels in the plasma of a newborn infant is equivalent by Jewish law to a history of two siblings having died after circumcision. A woman whose brothers bled to death after circumcision cannot have her child circumcised until the coagulation profile of her son is shown to be normal.²⁵

A second issue that arises is more complex. If hemophilia is the case of the Talmud, may a baby with hemophilia be circumcised if clotting factors are given to correct the coagulopathy, despite the cases in the Talmud and the prohibitive ruling of the *Shulhan Arukh*?²⁶

There are two ways to approach the issue. Perhaps the

²⁵ R. Moshe Feinstein, quoted in F. Rosner, *Medicine in the Bible & the Talmud*, 48, as a personal communication dated October 12, 1966.

²⁶ An alternative suggestion for safely circumcising a boy with hemophilia would be to utilize a laser. Such a procedure raises multiple questions, including whether a laser fulfills the requirement of "koah adam" (a human act), if a physical cutting with an instrument is necessary to fulfill the requirement of "milah" (literally, cutting), and if the lack of bleeding would invalidate the ritual circumcision due to the lack of "dam brit" (covenantal blood). The use of a laser would also preclude the proper performance of peri'ah (required removal of the mucus membrane that lies under the foreskin, which is usually performed as a separate step in the ritual circumcision), and it is also questionable if the inability to perform meaningful metzitzah (suctioning blood from the site of circumcision) would invalidate the circumcision.

The acceptability of using a laser for circumcision was first discussed by R. Yitzhak Yaakov Weiss (*Minhat Yitzhak* 8:89 and 9:89). See also J. Walfish, "Brit Milah Utilizing a Laser," Assia 14:4 (1995): 10-19 (republished in Sefer Assia 11 [2008], 183-91). For an extensive analysis of the permissibility of utilizing a laser for circumcising a boy with hemophilia, see J.D. Bleich, "Laser Circumcision," *Tradition* 43:3 (2010): 89-109.

baby is considered to have an illness even if clotting factors temporarily alleviate the coagulation deficiency entirely. Alternatively, perhaps the baby boy is not considered sick if he clots normally during the period of the circumcision. Analysis of this issue reinforces the need for very accurate information before deciding a halakhic issue.

In his book *Pioneers in Jewish Medical Ethics*, Dr. Rosner describes the evolution of this question. He explains that R. Moshe Feinstein refused to allow circumcision of babies with hemophilia throughout the 1960s, even after the development of clotting factors for hemophilia, stating firmly that until "they were cured," circumcision would have to wait. Dr. Rosner writes:

His logic is that even with the advent of blood products to replace the missing clotting factor, the risk of bleeding following circumcision is still substantially greater in a hemophiliac child than in a normal infant... In more recent years, with the availability of blood-clotting hemophilic factor concentrates, the risk of circumcision decreased significantly, so that Rabbi Feinstein permitted it.²⁷

At no time did the halakhic issues change; what

Even with modern-day treatment, it is not recommended that a newborn hemophiliac male be circumcised, for the risk of his bleeding after the operation is substantially greater than that faced by a normal infant. A woman who has a family history of hemophilia cannot have her son circumcised until coagulation studies show her son to be perfectly normal. Thus, by Jewish Law, one must today withhold circumcision and abide by the wisdom enunciated by Maimonides: "One may circumcise only a child that is totally free of disease, because danger to life overrides every other consideration."

²⁷ F. Rosner, "Rabbi Moshe Feinstein – Circumcision," in F. Rosner (ed.), *Pioneers in Jewish Medical Ethics* (Jacob Aronson, 1997),87-88. The same sentiment is echoed as late as 1979 in Goodman, *Genetic Disorders Among the Jewish People*, 57:

changed was the technology available to make the circumcision safe for a child with hemophilia. R. Feinstein clearly accepted that if clotting factors could eliminate the risk of circumcision, the child would no longer be considered ill with respect to the general prohibition of not circumcising a sick child and the specific prohibition of circumcising a baby with a *hazakah* that he will die following circumcision.²⁸

28 In the early 1980s, there was an additional health issue that, had it been known, might have changed the decision of whether it was permissible to use clotting factors to allow circumcision. The development of clotting factor from pooled plasma appeared to be a miraculous medical development, offering a normal life expectancy to hemophiliacs. But much of the clotting factors produced in the early 1980s were not safe. From the beginning of the AIDS epidemic until the pooled blood products provided to hemophiliacs were rendered safe, 5,000 hemophiliacs became infected with HIV; more than 4,000 of the estimated 10,000 hemophiliacs in the US eventually died of AIDS due to clotting factor produced from tainted blood products. See Gilbert C. White, "Hemophilia: An Amazing 35-Year Journey from the Depths of HIV to the Threshold of Cure," *Transactions of the American Clinical and Climatological Association* 121 (2010): 62-63.

AIDS was first described in the New England Journal of Medicine in December 1981. Within six months, the first description of AIDS in hemophilia appeared in the Center for Disease Control's Medical and Morbidity Weekly Report, with the CDC report providing strong evidence that AIDS was spread by blood. Yet it took several years before the blood products provided to hemophiliacs were presumed safe. tragedy was compounded by evidence that many of the deaths could have been avoided; clotting factor provided to hemophiliacs could have been made safer earlier. The drug companies allegedly recruited paid donors from high-risk populations and from cities that already had large numbers of infected people in order to obtain blood plasma for the production of Factor VIII and Factor IX. Since the clotting factors were produced using pools of plasma from at least 10,000 donors at a time when HIV could not be screened out, the plasma carried a high risk of passing along the disease. Even after they were aware of the danger, the companies producing the pooled clotting factors continued to sell blood products outside of the United States that carried a high risk of infection. This led to major lawsuits and prosecutions around the world; see "Two Paths of Bayer Drug in 80's: Riskier One Steered Overseas," The New York Times, May 22, 2003.

It is clear that during that period, the use of clotting factors from pooled donors would have presented a serious halakhic question as to the propriety

Dr. Abraham describes a similar ruling of R. Shlomo Zalman Auerbach, as well as the objection of the renowned *posek*, R. Yehoshua Neuwirth (author of *Shemirat Shabbat Ke-Hilkhatah*):

The missing factor can be injected before and after the *brit*, and Rav Auerbach *zt"l* told me that it would be permissible to circumcise such a baby. Rav Neuwirth *shlita* wrote to me asking why this is not considered a disease and,

and permissibility of using such medication to allow circumcision. This issue was not dealt with in the halakhic literature at the time because the threat from pooled plasma was not public knowledge, and therefore was not presented to the *poskim* (personal communication with Dr. Abraham, July 16, 2012).

Thankfully, this consideration is no longer a practical consideration, as the blood supply is far safer and recombinant DNA produced clotting factors, which do not require donors, is now available.

Dr. Abraham reported (*Nishmat Avraham*, YD 263:2) that at the time of publication of his book, a genetically engineered factor was available for intravenous injection and that a trial of gene therapy had just been reported with a successful but transient effect (not longer than ten months), with two other trials underway. Ten years after the trial described by Dr. Abraham ("Nonviral Transfer of the Gene Encoding Coagulation Factor VIII in Patients with Severe Hemophilia A," *New England Journal of Medicine* 344(23) [June 7, 2001]), which did not provide a cure for hemophilia A, another article described a major success in utilizing gene therapy to treat a disease ("Adenovirus-Associated Virus Vector–Mediated Gene Transfer in Hemophilia B," *New England Journal of Medicine* 365(25), [December 22, 2011]). The report was hailed as a highly significant milestone in gene therapy ("Treatment for Blood Disease Is Gene Therapy Landmark," *The New York Times*, December 10, 2011):

Medical researchers in Britain have successfully treated six patients suffering from the blood-clotting disease known as hemophilia B by injecting them with the correct form of a defective gene, a landmark achievement in the troubled field of gene therapy. Hemophilia B, which was carried by Queen Victoria and affected most of the royal houses of Europe, is the first well-known disease to appear treatable by gene therapy, a technique with a 20-year record of almost unbroken failure.

although treatment is available, the disease remains. Rav Auerbach *zt*"*I* answered that as long as the baby does not bleed unnaturally, he is not considered ill.²⁹

Dr. Abraham describes that R. Auerbach went even further, permitting (and requiring, if possible) the circumcision to be performed even on Shabbat if that is the eighth day after the baby's birth if the intravenous catheter for cryoprecipitate infusion was either placed before Shabbat or inserted by a non-Jew. However, R. Auerbach also ruled that if the baby has an allergic reaction with fever to the injected material, "it would be forbidden to circumcise him ever."³⁰

The logic behind R. Auerbach's opinion is enlightening. A *brit milah* can only be performed on Shabbat if it is mandatory. R. Auerbach ruled that so long as the baby's clotting abnormality could be even temporarily reversed during the circumcision, the infant would not be considered ill with respect to the prohibition of circumcising a sick baby, and therefore the *brit* should be performed on Shabbat as for any other "healthy" newborn. Since the circumcision could not be performed without the administration of the clotting factors, it is **required** to administer the cryoprecipitate to facilitate the performance of the *brit milah* in its proper time, even if this involves overriding the Rabbinic prohibition of instructing a non-Jew to place the intravenous infusion catheter on Shabbat!³¹ This logic was disputed by R. Neuwirth.³²

Conclusion

It seems that we have come full circle. At a time when a

²⁹ Nishmat Avraham, YD 263:2 (English edition, vol. 2, 206-7).

³⁰ Ibid.

³¹ The administration of the cryoprecipitate itself involves no Shabbat prohibition once the catheter is in place, so long as one does not draw back on the syringe to confirm catheter placement.

³² Personal communications with Dr. Abraham (May 30, 2004 and May 17, 2006).

mysterious bleeding disorder led to the death of baby boys from particular families, circumcising such children was clearly forbidden. Today, after recognizing the cause of the bleeding disorder as hemophilia and developing a cure (albeit temporary), the final practical *halakhah* appears to be exactly the opposite of the rulings of the Talmud and *Shulhan Arukh*, with circumcision for boys with hemophilia possibly being an obligation!³³ The transformation in practical *halakhah* is not because the principles of Jewish law have changed, but because the facts of the case have changed. Had modern technology been available at the time of the Talmud, the law would have been the same as it is today.

The story of hemophilia in Jewish law provides a fascinating insight into the observational powers of the Talmudic rabbis. We also see the flexibility of Jewish law and how it responds to up-to-date medical information to provide accurate halakhic rulings. It should provide at least a small degree of humility to our modern minds to realize that rabbis who lived many centuries before the first medical description of hemophilia not only recognized its inheritance pattern, but established laws to guard the health of babies who might have the disease.

³³ The same would apply to any other similar curable bleeding disorder or other life-threatening condition that can be treated.

The Valmadonna Trust Broadsides: A Virtual Reunion for the Jewish Medical Students of the University of Padua

RABBI EDWARD REICHMAN, MD

The Valmadonna Trust Library, the private collection of Jack Lunzer, is one of the most important collections of Hebraica ever amassed by one individual. Comprised of some 13,000 Hebrew printed books and manuscripts, the collection encompasses works from across the globe and spanning over a millennium and includes many first printed editions of classic Rabbinic works. By most accounts, it rivals the great institutional collections in the world.

I vividly remember the "religious" experience of visiting the collection during its Sotheby's viewing in 2009, when it was first put up for auction. The reverberations of this experience remain with me to this day. It felt as if I was enveloped by and immersed in all of Jewish history simultaneously. The Vilna Gaon notes that the *mitzvah* of *sukkah* is unique in that

Edward Reichman is a Professor of Emergency Medicine and Professor in the Division of Education and Bioethics at the Albert Einstein College of Medicine of Yeshiva University, where he teaches Jewish medical ethics. He received his rabbinic ordination from the Rabbi Isaac Elchanan Theological Seminary of Yeshiva University and writes and lectures internationally in the field of Jewish medical ethics. He has been a mentor of the Medical Ethics Society of Yeshiva University since its inception. His research is devoted to the interface of medical history and Jewish law.

it is performed with one's entire body. I experienced this sentiment upon entering the viewing hall of the Valmadonna Trust collection. Only here, the walls of this "sukkah" were comprised of first editions of classic works of Jewish scholarship from virtually every country of Jewish inhabitance throughout history. While the Mishnah in Sukkah includes a number of materials that one could use to form a halakhically valid sukkah wall, including animals and trees, it for some reason neglects to include a wall comprised of rare books... Anyway, this wall would likely have been invalid for another reason – it was more than twenty amot high!

I also recall the mixed emotions of seeing such a collection being potentially auctioned off to hundreds of buyers, perhaps never again to be housed in one *sukkah*. I was comforted to learn of Mr. Lunzer's stipulation that the collection be sold *en bloc* to one buyer, that it not be subdivided, and that it remain accessible to scholars.

There is little unique or of significance in the field of Jewish medical history to be found in this book collection. Of course, it includes a copy of the ubiquitous *Ma'aseh Tuviah* by Tuviah Ha-Rofeh Cohen.¹ It also boasts the first book printed

1 On Cohen and his work, see A. Levinson, "A Medical Cyclopedist of the Seventeenth Century," Bulletin of the Society of Medical History (January 1917): 27-44; D.A. Friedman, Tuviah Ha-Rofeh (Palestine Jewish Medical Association, 1940); M.J. Mahler, A Precursor of the Jewish Enlightenment: Dr. Tobias Cohen and his Ma'aseh Tuvia (unpublished thesis for ordination, Hebrew Union College, 1978); N. Allan, "Illustrations from the Wellcome Institute Library: A Jewish Physician in the Seventeenth Century," Medical History 28 (1984): 324-8; D. Ruderman, "On the Diffusion of Scientific Knowledge within the Jewish Community: The Medical Textbook of Tobias Cohen," in Jewish Though and Scientific Discovery in Early Modern Europe (Yale University Press, 1995), 229-55; S.G. Massry, et. al., "Jewish Medicine and the University of Padua: Contribution of the Padua Graduate Toviah Cohen to Nephrology," American Journal of Nephrology 19:2 (1999): 213-21; E. Lepicard, "An Alternative to the Cosmic and Mechanic Metaphors for the Human Body? The House Illustration in Ma'aseh Tuviyah (1708)," Medical History 52 (2008): 93-105. See also Koroth 20 (2009-2010), in which five articles are devoted to Tobias Cohen and his Ma'aseh Tuviah. On the relationship between Cohen and the Jerusalem physician R. Dr. David

in the lifetime of its author, *Nofet Tzufim*, by Judah Messer Leon (c. 1420-c. 1498). The fact that the author was a physician and that the work may have been used to train Jewish physicians in rhetoric in preparation for their matriculation into Italian Universities is indeed of great import to the Jewish medical historian,² although this point is omitted by the Trust librarians and cataloguers.³

There is another division of the library, however, that reveals a remarkable historical record of the training of Jewish medical students. The library possesses a rare collection of 554 broadsides. Broadsides are primarily single sheets of paper printed on one side for public distribution or posting, similar to a modern day poster, flyer, or pashkevil. They have long served as an important documentary source for historians. The entire broadside collection in the Valmandonna Trust has been digitized and is now available for viewing online.⁴ In addition, an accompanying catalogue has recently been published.⁵

The broadsides are divided into a number of categories, including prayers, calendars, education, and occasional poems. The occasional poems cover a variety of life-cycle events,

De Silva, as well as for information about Cohen's death, see Z. Amar, *Pri Megaddim by Rabbi David de Silva, Physician of Jerusalem* (Yad Ben Tzvi Press, 2003), 41-45.

² See I. Rabinowitz, *The Book of the Honeycomb's Flow, Sepher Nopheth Suphim by Judah Messer Leon: A Critical Edition and Translation* (Cornell University Press, 1983), esp. li-lii.

³ B. Sabin Hill, *Hebraica from the Valmadonna Trust Library* (Valmadonna Trust Library Publication, 1989), n. 7; D. Sclar, ed., *Treasures of the Valmadonna Trust Library* (Valmadonna Trust Library Publication, 2011).

⁴ Valmadonnabroadsides.com.

⁵ S. Liberman Mintz, S. Seidler-Feller, and D. Wachtel (eds.), *The Writing on the Wall: A Catalogue of Judaica Broadsides from the Valmadonna Trust Library* (London, 2015).

⁶ For an overview of the broadside collection, see the introductory essays in S. Liberman Mintz, S. Seidler-Feller, and D. Wachtel (eds.), ibid. D. Bregman discusses the Hebrew poems in her essay, "Hebrew Poems in the Valmadonna Broadside Collection." See also S. Liberman Mintz, S. Seidler-Feller, and D. Wachtel, "The Valmadonna Broadsides," *Tablet* (November 2, 2015). The publication of the broadsides online has stimulated further

including weddings, anniversaries, and funerals. Among the poems are fifteen written in honor of a unique occasion – graduation from medical school.

All of the students for whom these congratulatory poems were written graduated from the same medical school, the University of Padua, although not in the same year; the graduation dates span from 1664⁷ to 1783. The Jewish graduates from the University of Padua Medical School during this time period numbered around three hundred. This university has a special place in Jewish medical history and was the first to officially open its doors to Jewish students. The catalogue briefly glosses over this unique subcategory, a fact that I hope this contribution will begin to rectify.

In a recent article, I reviewed Jewish medical student dissertations throughout the centuries that are devoted specifically to Jewish topics. ¹⁰ As you can imagine, this is a rare literary genre. Nevertheless, I was surprised that my research did not reveal even a single dissertation of this type from the University of Padua, where many a Jewish student studied medicine. I later learned the reason for this – the University of Padua did not require a written dissertation for graduation from medical

analysis of their historical and halakhic import. See, for example, E. Brodt and D. Rabinowitz, "The Valmadonna Broadside Collection: Review Essay," http://seforim.blogspot.com/2016/02/the-valmadonna-broadside-collection.html (viewed April 18, 2016).

⁷ The catalogue misprints the date as 1660. This may be a result of confusion with the date of graduation of the author of the poem, Shlomo Conigliano, who graduated Padua in 1660 (see below).

⁸ See A. Modena and E. Morpurgo, *Medici E Chirurghi Ebrei Dottorati E Licenziati Nell'Universita di Padova dal 1617 al 1816* (Italian) (Forni Editore, 1967). They provide a fairly comprehensive list. Many other students attended the school but did not complete their course of study.

⁹ On Padua and the training of Jewish medical students in general, see E. Reichman, "From Maimonides the Physician to the Physician at Maimonides Medical Center: The Training of the Jewish Medical Student throughout the Ages," *Verapo Yerape* 3 (2011): 1-25.

¹⁰ E. Reichman, "The History of the Jewish Medical Student Dissertation: An Evolving Jewish Tradition," in press.

school, as did other European universities.¹¹ There were thus no dissertations to be found. Lest one think that these students were not invested in their Jewish tradition, even a cursory review of the biographies of the students and poets represented in the broadside collection will indicate otherwise.

We referred to a few of these poems briefly in this journal in the past.¹² Now, however, a large number of them are available for viewing online in one location. It is in a sense a virtual medical school reunion, bringing together a number of students who graduated the premier medical school in Italy, the University of Padua, over a span of decades. ¹³ All the broadsides (meaning, the students) are on one screen of your computer, in one virtual room, "standing" next to each other. To view all these students in close proximity is to be transported back to a remarkable period in Jewish medical history, when Jews were first allowed into medical schools; when, despite their acceptance, Jews paid higher tuition fees and had special obligations; when systematic anatomical dissection was for the first time being integrated into the curriculum and Jews paid handsomely to prevent Jewish bodies from reaching the dissection tables; when preparatory schools helped Jewish students transition from the shtetl to the university and Vesalius' work was translated into Yiddish; and when the community's pride in its Jewish medical graduates was expressed in poetry and fanfare.

Using a medical school reunion as a literary conceit, we will catch a glimpse of the life of the medical students who

¹¹ I thank Remigio Pegoraro of the Centro per la Storia dell'Università di Padova for this information.

¹² E. Reichman, "From Maimonides the Physician to the Physician at Maimonides Medical Center." See also M. Benayahu, "Songs on the Occasion of the Graduation of the Physician Yehuda Matzliach Padova," *Koroth* 7(1-2) (April 1976): 39-49; idem., "*Rabbi Avraham Ha-Kohen Mi-Zanti U-Lehakat Ha-Rof'im Ha-Meshorerim Be-Padova,*" *Ha-Sifrut* 26 (1978): 108-40. 13 Broadsides of similar congratulatory poems for Jewish medical students, in both Hebrew and vernacular, are extant in other libraries as well, in particular at the library of the Jewish Theological Seminary and the National Library in Jerusalem. I thank Laura Roumani for her invaluable assistance in directing me to these collections.

appear in the Valmadonna Collection and perhaps see, in retrospect, which of them should have been voted most likely to succeed. While it is not possible, of course, for all of these students to have attended a reunion together, although many in fact were contemporaries, we take the liberty of uniting them for our virtual reunion. Please suspend your chronological calculations as you continue reading. Below is a record of the proceedings of the reunion, narrated by our Master of Ceremonies, Shlomo Conigliano.

University of Padua Medical School Reunion Venue: Valmadonna Trust (virtual) Library Master of Ceremonies: Dr. Shlomo¹⁵ Conigliano (Class of 1660), Founder and Director of the Institute for the Advancement of the Jewish Medical Student in Venice

Program

I. Welcome to Reunion Attendees and Recitation of Congratulatory Poems

II. Award Presentations

III. Invocation and *Divrei Berakhah* by R. Yehudah Briel

IV. Keynote Address by R. Moshe Hayim

V. In Memorium

¹⁴ Here we discuss a selection of students. The medical student poems span from numbers 99-114 of the online broadside catalogue, in the "poems" section.

¹⁵ I intentionally use the Hebrew names for all the personalities we discuss to emphasize the Jewish context. In the medical historical literature, they are typically referred to by their secular names.

I. Welcome and Poem Recitation

Dear fellow graduates: It is a distinct honor and pleasure for me to host our medical school reunion. My name is Shlomo Conigliano, and I graduated from the University of Padua (U of P) Medical School in 1660.16 Soon thereafter, I established a preparatory school in Venice for young Jewish students from Europe who wish to transition to our great medical schools here in Italy, in particular our Alma Mater, the University of Padua.¹⁷ I have seen that our brethren from other countries, such as Poland and Germany, are ill equipped in the technical skills, though not the intellectual prowess, to immediately enter the university upon their arrival in Italy. In addition, it is a struggle to continue one's Torah learning while in pursuit of a medical degree. I have made it my life's work to aid these students materially, emotionally, religiously, and technically in their quest to gain an advanced medical education while at the same time facilitating their religious connection and growth. It is particularly gratifying to see how many of my students have gone on to complete their medical education here at U of P.

I take particular pride in acknowledging the presence of my nephew Zevulun at this reunion.¹⁸

¹⁶ Modena and Morpurgo, *Medici*, 26-27, n. 64. A broadside poem in honor of Conigliano's graduation in 1660, authored by Simhah Calimani, is housed in the JTS Library, Ms. 9027, v. 5, n. 24. This is a different Simhah Calimani than the author of the poems for the students in our reunion, Valmarin and Yosef Conigliano. The latter Calimani was a Venetian rabbi, poet, orator, and Talmudist who was born around 1699 and died in 1784. I have been unable to find biographical information on the younger Calimani, but I suspect (though cannot confirm) that they are related.

¹⁷ Ruderman, "On the Diffusion of Scientific Knowledge," 111-13. For more on the Conigliano family, see D. Kaufmann, *Dr. Israel Conigliano* (Adolf Alkalay, 1895). A copy of Shlomo Conigliano's epitaph appears on p. 131. Judah Messer Leon, mentioned above, may have been involved in similar activities.

¹⁸ A poem for his graduation is found in the broadside online collection, #103: Zevulun ben Yisrael Conigliano, 1716. There are two other students on our list with the name Conigliano who are possibly related as well.

I would also be remiss if I did not note the absence of some our dear friends and fellow graduates who could not be with us here today, such as the renowned polymath Yosef Shlomo Delmedigo,¹⁹ Menahem Yehiel Colli,²⁰ Shlomo Lustro,²¹ and, of course, my dear student and colleague Tuviah Cohen. Tuviah, one of our finest graduates, would have loved to join us, but as per his response to my invitation, he simply cannot escape his clinical and social obligations in Turkey and Israel.²² You are, of course, familiar with his exceptional work, *Ma'aseh Tuviah*, and I have arranged for all of you here at the reunion to receive a copy.²³

In keeping with our tradition here in Italy, and specifically here at U of P, we begin the evening with the recitation of poems in honor of our graduates. You will find a list of graduates and the text of the poems in your programs.²⁴

¹⁹ On Delmedigo, see, for example, D. A. Friedman, "Joseph Shelomoh Delmedigo," *Medical Leaves* 4 (1942): 83-95; G. Alter, *Two Renaissance Astronomers* (Czechoslovakia Acadamy, 1958); I. Barzilay, *Yoseph Shlomo Delmedigo* (E. J. Brill, 1974). Delmedigo's brother, Abba di Elia Modena, also graduated from the University of Padua Medical School. See Modena and Morpurgo, *Medici*, 11, n. 22.

²⁰ The continued impact of Conigliano on the medical students of Padua is evidenced by his mention in the diploma of Emanuel Colli in 1682. Colli's magnificently illustrated diploma can be viewed online at http://www.magnesalm.org (accessed April 18, 2016).

²¹ Conigliano wrote a poem for Lustro's graduation from Padua. Yitzhak Cantarini, discussed below, also authored a poem for Lustro. See M. Benayahu, "*Rabbi Avraham Ha-Kohen Mi-Zanti*," 108-40, esp. 125-30.

²² See A. Morgenstern, "Tuviah the Physician and the Jews of Jerusalem in the Years 1715-1729" (Hebrew), *Cathedra* 142 (Tevet 5772): 27-54.

²³ Cohen praises Conigliano in the introduction to his work, and the praise is reciprocal, as reflected in Conigiano's poetic approbation to *Ma'aseh Tuviah*. 24 The chart is in the order of appearance of the broadside poems in the online collection, from numbers 99 to 113.

Graduate	Year of Graduation	Poem Author
Yitzhak Hayim Cantarini	1664	Shlomo Conigliano
Yaakov ben Yehudah Leib	1669	Yitzhak Hayim
Winkler		Cantarini
Azriel ben Hayim Moshe	1697	Unknown
Cantarini		
Yaakov ben Avraham Yehiel	1710	Moshe Raphael
Levi Polacco		Ottolenghi
Zevulun ben Yisrael	1716	Yehoshua ben Asi
Conigliano		
Yaakov ben Moshe Hayim	1720	Yitzhak ben Shabtai
de Silva		Marini
Elisha ben Shlomo Constan-	1726	Avraham ben
tini		Shabtai HaKohen
Asher ben Shabtai Marini	1733	Yeshayah Romanin
Yisrael Gedaliah ben Moshe	1733	Yeshayah Romanin
Cases		
Shlomo Lampronti	1735	Yeshayah Romanin
Yisrael ben Yosef Valmarin	1746	Simhah Calimani
Shlomo ben Menahem Aziz	1761	Unknown
Yosef ben Naftali Conigliano	1774	Simhah Calimani
Amadeo Conigliano	1783	Unknown
Benedetto Viola	1783	Unknown

I will begin by reciting a poem I composed in honor of Yitzchak Cantarini,²⁵ the oldest graduate in attendance today. Yitzchak graduated four years after me,²⁶ but he was the very

^{25 #99} in the online catalogue. The text of Conigliano's poem is more expansive than the average medical student graduation poem, which usually consisted of a handful of stanzas.

²⁶ Conigliano was roughly twenty-two years old at the time of Cantarini's graduation.

next Jewish student to complete his studies at U of P.²⁷ We will learn more about what Yitzchak has done since his graduation when we present him with his award later in the program.

I would like to take a moment to acknowledge our poet-authors for this evening, who will be reading their works for us presently.

Yitzhak Cantarini takes the dual role today of both recipient and author of a congratulatory poem. Yitzhak wrote a poem for Yaakov ben Yehudah Leib Winkler, Class of 1669.²⁸ You will notice that Yitzhak followed my lead regarding the length of his poem.²⁹ The theme of his poem focuses on flora and fauna of nature where the progeny is exactly like the parent, reflecting the fact that Yaakov is a physician just like his father before him.³⁰

Our most prolific poet at the reunion is Yeshayah Roman,³¹ author, poet, and Torah scholar. Roman will be reciting poems for three graduates today – Asher b. Shabtai Marini,³²

²⁷ Modena and Morpurgo, Medici, 26-27.

^{28 #100} in the online catalogue.

²⁹ Cantarini's poem was as lengthy as that of Conigliano.

³⁰ See D. Bregman, "Hebrew Poems in the Valmadonna Broadside Collection," in S. Liberman Mintz, S. Seidler-Feller and D. Wachtel (eds.), *The Writing on the Wall*, 48-61, esp. 59. The theme of the progeny of the Winkler family following suit and becoming physicians carried on to subsequent generations. See D. Kaufmann, "Hundert Jahre aus einer Familie Judischer Artze: Dr. Leo, Dr. Jakob, Dr. Isak, Dr. Wolf Winkler," in *Gesammelte Schriften* III (Frankfurt, 1915), 286-95.

³¹ Also referred to as Roumanin or Romanin. On Roman, who was a colleague of Ramhal, see M. S. Ghirondi, *Sefer Toledot Gedolei Yisrael* (Trieste, 1853), 181; M. Benayahu, "*Ketavav shel Yeshayah Romanin Mi-Padovah*," *Bar Ilan* 14-15 (5737): 181-217; Ruderman, "On the Diffusion of Scientific Knowledge," 152.

^{32 #106} in the online catalogue. Roman also wrote a *kinah* after the death of Marini's father, Shabtai, who was also a medical graduate of Padua. See Modena and Morpurgo, *Medici*, 41, n. 100; M. Benayahu, "*Rabbi Avraham Ha-Kohen Mi-Zanti*," 137.

Shlomo Lampronti,³³ and Yisrael Gedaliah Cases.³⁴ Simhah Calimani, the Venetian rabbi, poet, orator, and Talmudist, offers poems to two of our graduates at the reunion. His revisededition of the responsa of R. David ben Zimra is a wonderful addition to the Rabbinic literature. While Avraham ben Shabtai Ha-Kohen contributes only one poem at today's reunion, we all know him as a frequent literary presence in our circles.³⁵

II. Award Presentations

Distinguished Alumnus Award *Yitzhak Hayim Cantarini* (1644-1723)³⁶

Our choice this year for the Distinguished Alumnus Award was an obvious one. Yitzhak Cantarini graduated from U of P on February 11, 1664, one of many Cantarinis who earned their medical degrees from the university.³⁷ This family of *Kohanim* were also associated with the cantorial profession – hence the name Cantarini, or *MinHaHazanim*, as their He-

^{33 #108} in the online collection. A copy of the same broadside is found in the JTS Library, Ms 9027 V5:9.

³⁴ Like Cantarini, Cases' graduation from the University of Padua in 1733 followed a family tradition. See Modena and Morpurgo, *Medici*, 118. Many of these physicians were also rabbis, including Cases' grandfather, Yosef Barukh. On both Yisrael Gedaliah and Yosef Barukh Cases, see S. Simonsohn, *The History of the Jews in the Duchy of Mantua* (Kiryath Sepher, 1977), 699-700. On Yosef Barukh Cases, see H. J. Zimmels, *Magicians, Theologians and Doctors* (Edward Goldston and Sons, 1952), 123, who discusses Cases' lengthy responsum on the nature of different medical therapies and their halakhic permissibility. Parenthetically, this responsum mentions the use of chicken soup for medicinal purposes.

³⁵ M. Benayahu, "Rabbi Avraham Ha-Kohen Mi-Zanti," 108-40.

^{36#99} in the online catalogue. On Cantarini, see, for example, H. A. Savitz, *Profiles of Erudite Jewish Physicians and Scholars* (Spertus College of Judaica Press, 1973), 25-28.

³⁷ Modena and Morpurgo, *Medici*, 118; see Ruderman, "The Diffusion of Scientific Knowledge," 113-14, regarding families with multiple graduates from the university.

brew name reflects. We will avail ourselves of Yitzhak's cantorial expertise later in the program.

After graduated from U of P, Yitzhak went on to become a leading figure in our Italian community. Yitzhak is considered one of the Torah sages (*gedolim*) of Italy today, and his responsa have been published in both Yitzhak Lampronti's *Pahad Yitzhak* and Samson Morpurgho's *Shemesh Tzedakah*, both of whom we are proud to count amongst our alumni.³⁸ Yitzhak has written halakhic, historical, and homiletic works, as well as medical treatises in Latin.

Yitzhak is a poet, author, and consummate orator; non-Jewish clergy and lay people attend his Shabbat sermons. I recall that in the year 5460 there were so many non-Jewish visitors in synagogue when he spoke that the regulars had to ascend to the women's section (*ezrat nashim*) to pray.³⁹ Non-Jews seek out his sage advice as well, as evidenced by his correspondence with the Christian intellectual Theophilio Ungar.⁴⁰ One of his students is Moshe Hayim Luzzatto (Ramhal), the famous kabbalist and philosopher, from whom we will hear shortly as our guest speaker.⁴¹

In Cantorini's work entitled *Pahad Yitzchak*, he recorded an account of the anti-Jewish incident in the Jewish ghetto of Padua in 1684, which many of us remember.⁴² After our

³⁸ On Morpurgo, see H. Friedenwald, *The Jews and Medicine* (Johns Hopkins Press, 1944), index; Modena and Morpurgo, *Medici*, 62, n. 147; Zimmels, *Magicians, Theologians and Doctors*, 122-3; Simonsohn, *The History of the Jews in the Duchy of Mantua*, index.

³⁹ S. Y. Glicksberg, Ha-Derashah Be-Yisrael (Mosad HaRav Kook, 5700), 203-20.

⁴⁰ See Y. Blumenfeld, Otzar Nehmad 3 (Vienna, 1860), 128-50.

⁴¹ Ramhal wrote a eulogy for Cantarini. See R. Moshe Hayim Luzzatto, *Sefer Ha-Shirim*, ed. Y. Zemora (Mosad HaRav Kook, 5710), 4.

⁴² Pahad Yitzhak (Amsterdam, 1684). See M. Heller, *The Seventeenth Century Hebrew Book* (Brill, 2011), 1077. For a discussion of different depictions of *Akeidat Yitzhak* in Cantarini's works, see M. Heller, *Further Studies in the Making of the Early Hebrew Book* (Brill, 2013), 46 ff. See also http://seforim.blogspot.com/2006/11/akedah-art-and-illustrations-in-hebrew. html.

dear friend, Hananel (Graziadio) Levi was tragically murdered, the non-Jewish medical students stormed the ghetto to obtain his body for dissection for the medical school. All Riots ensued, and ultimately, after negotiations, the body was returned to our community for proper burial. The issue of our community's religious refusal to provide bodies for the anatomy lab here in Padua remains a source of political contention, as each of you, irrespective of the year of your graduation, is most assuredly acutely aware. It is the hope that Yitzhak's eloquent account will preserve the memory of these tragic events long after we are gone.

Azriel ben Hayim Moshe Cantarini,⁴⁶ Yitzhak's grandnephew, joins us today as well, both as an alumnus and to pay tribute to Yitzhak. Azriel, who graduated from Padua in 1697,⁴⁷ is the son of Hayim Moshe Cantarini, who is also a practicing physician, as well as an instructor in the yeshiva.⁴⁸ I

⁴³ Pahad Yitzhak, 45a ff. On the history of anatomical dissection in Rabbinic literature, see E. Reichman, "The Anatomy of Halakhah," in Y. Steinberg (ed.), Berakhah Le-Avraham (Jerusalem, 2008), 69-97.

⁴⁴ I discovered a wedding poem written a number of years earlier by the murder victim, Graziadio (Hananel) Levi for the wedding of Saul Lustro and Allegra Barukh in 1676. See JTS Library B (NS)CR2

⁴⁵ See Reichman, "Anatomy of Halakhah."

^{46 #101} in the online catalogue. It is one of few broadsides that is hand-written.

⁴⁷ Modena and Morpurgo, Medici, 59, n. 135.

⁴⁸ Hayim Moshe' Cantarini's writings included Rabbinic responsa, as well as glosses on halakhic texts. In an unpublished manuscript, *Mar'eh Ha-Sneh*, he describes the murder of a Jewish student whose body was seized by local medical students for anatomical dissection. This likely refers to the same incident described by his uncle in his *Pahad Yitzhak*, discussed above. The *ketubah* for Hayim Moshe Cantarini, dated November 1, 1680, is extant and is one of only ten known decorated *ketubot* created in Padua during the 17th century. The *ketubah* was auctioned at Sotheby's on November 24, 2009. The coat of arms of the Coen-Cantarini family (hands in the position of priestly blessing, surmounted by a crown), is prominently displayed in a medallion at the top of the *ketubah*. Surprisingly, an almost identically decorated *ketubah*, bearing the same date and the same family names, is found in the collection of the National Library of Israel: http://web.nli.org.il/sites/nli/hebrew/digitallibrary/pages/viewer.aspx?presentorid=NLI_

ask Azriel to join me on stage to present the award to his great uncle, Yitzhak Cantarini.

Legacy Award

The Lampronti Family

Today we honor the Lampronti family with the Legacy Award. We instituted this award to pay tribute to families whose commitment to Torah and medicine spans across the generations. R. Yitzhak Lampronti is one of our finest graduates, as well as one of the greatest figures of the Italian Renaissance. 49 Lampronti authored the first alphabetical halakhic encyclopedia, entitled *Pahad Yitzchak*, 50 which contains many references to medical topics. 51 The manuscript copy of his magnum opus is on display here at the reunion for all to peruse. 52 Lampronti also corresponded with some of the greatest medical personalities, such as our own faculty member Giovani Baptista Morgagni,

Ktubot&DocID=NNL_Ktubot_ROS000300722 (viewed April 18, 2016). That *ketubah* records a marriage between the sister of the present groom and the brother of the present bride. It is likely that both social and financial considerations encouraged the combination of these two festive occasions into a single celebration.

- 49 Much has been written about Lampronti and his work, including his medical practice. See, for example, D. B. Ruderman, "Contemporary Science and Jewish Law in the Eyes of Isaac Lampronti and Some of his Contemporaries," *Jewish History* 6(1-2) (1992): 211-24; D. Margalit, "Rabbi Yitzchak Lampronti Rabbi, Physician, and Lexicographer" (Hebrew), in *Chakhmei Yisrael Ke-Rof'im* (Mosad HaRav Kook, 5722), 152-74: H.A. Savitz, "Dr. Isaac Lampronti," in *Profiles of Erudite Jewish Physicians and Scholars* (Spertus College Press, 1973), 29-32.
- 50 Not to be confused with the contemporary work of the same name by Cantarini (see above), or with the later, presently better known work of R. Yitzhak Hutner.
- 51 D. Margalit excerpted all the medically related entries of Lampronti's *Pahad Yitzhak* in "Medical Entries in the Halakhic Encyclopedia *Pahad Yitzhak* of Rabbi Yitzchak Lampronti" (Hebrew), *Koroth* 2:1-2 (April 1958): 38-60.
- 52 Lampronti's handwritten manuscript of *Pahad Yitzhak* is housed in the Valmadonna Trust Library.

regarding his medical practice.⁵³ His teachers included Yitzhak Cantarini, our honoree, R. Yehudah Briel, who is also with us here today, and R. Yosef Cases, also a physician, whose grandson, Yisrael Gedaliah Cases, is attending our reunion as well.

Two of R. Yitzhak Lampronti's sons, Shlomo and Shmuel,⁵⁴ are also alumni of our fine institution and are carrying on the family tradition. Shlomo is here today⁵⁵ to represent the family and accept the award. In addition to his role as a physician, we acknowledge Shlomo's many years of service as the community *mohel* (ritual circumciser). I see many of you here today who have had the privilege of having Shlomo serve as the *mohel* for your sons and grandsons.⁵⁶

I would like to ask R. Yehudah Briel, the teacher and mentor of Shlomo's father, to join us onstage to present the award to the Lampronti family.

III. Invocation – Divrei Berakhah

I ask R. Briel to please remain onstage. R. Yehudah Briel has had a special relationship with a number of our students over the years, including R. Dr. Yitzhak Lampronti, as we mentioned earlier. Many of you are familiar with the correspondence between R. Briel and R. Dr. Lampronti about the spontaneous generation of lice, which appeared in the latter's *Pahad Yitzhak*. ⁵⁷ For those of you unfamiliar with this ex-

⁵³ See S. Jarcho, "Dr. Isac Lampronti of Ferrara," Koroth 8:11-12 (1985): 203-6.

⁵⁴ See Modena and Morpurgo, Medici, 83, n. 223.

^{55 #108} in the online collection. M. Benayahu viewed the original medical diploma of Shmuel Lampronti in the private collection of Professor Roberto Bachi in Jerusalem. Bachi died in 1995 and I have been unable to identify the present whereabouts of the diploma.

⁵⁶ The manuscript log of the circumcisions of Shlomo Lampronti from 1753-1783, containing 226 entries, was sold at auction by Kedem Auction House on May 12, 2012; see https://www.kedem-auctions.com/content/notepad-circumciser-rabbi-shlomo-lampronti (accessed August 7, 2016).

⁵⁷ Pahad Yitzhak, s. v. tzeidah asurah. On the Lampronti-Briel exchange and spontaneous generation, see, for example, N. Slifkin, "The Spontaneous Sweat-Louse," in Sacred Monsters (Gefen Books, 2007), 349-81; M.

change, we bookmarked the exhibit copy at this passage for your convenience. The issue of spontaneous generation in the Talmud remains a topic of great interest, and perhaps we can invite R. Briel at a future time give the alumni a shiur on this topic. R. Briel was also a mentor of Yitzhak Cantarini, ⁵⁸ the recipient of our Distinguished Alumnus Award today, and of Gabriel Felix, ⁵⁹ a close friend of one of our most famous graduates, Tuviah Cohen. We are delighted that both Felix and Cohen decided to transfer from the University of Frankfurt to U of P, ⁶⁰ but regretfully, neither Felix nor Cohen were able to attend our reunion.

R. Briel will now offer us *divrei berakhah* (words of blessing). [The text of R. Briel's address is not preserved.]

IV. Keynote Address

It is a special honor for us to have one of the most remarkable personalities of our time to address our students for our reunion. R. Moshe Hayim Luzzatto, a resident of Padua, known to many of us simply as Ramhal, is the author of the ubiquitous *Mesilat Yesharim* and other classic works of Jewish philosophy and *mussar*.⁶¹ What is less known about Ramhal is

Meiselman, Torah, Chazal, and Science (Israel Bookshop, 2013), 279-95.

⁵⁸ Cantorini wrote a magnificent eulogy for Briel. See S. D. Luzzatto in Y. Blumenfeld, *Otzar Nehmad* 3 (Vienna, 1860), 148-9. The eulogy is a masterpiece of word play, acronyms, and linguistic gymnastics.

⁵⁹ For a record of the correspondence of Felix and Briel, see D. Kaufmann, "Une Lettre de Gabriel Felix Moschides a R' Juda Briel," Revue Des Etudes Juives 32 (1896): 134-7. The letter addresses the Talmudic expertise of Gabriel and his father and explains that Felix's graduation from medical school was delayed due to a combination of illness and lack of financial means. Felix graduated only a few weeks after Cohen on July 9, 1683.

⁶⁰ Gabriel Felix is best known as the companion of Tuviah Cohen, who, along with Felix, left the medical school in Frankfurt to complete their training in the University of Padua, which was far more receptive to Jewish students. See Cohen's introduction to his *Ma'aseh Tuviah*, which details his travails with Felix.

⁶¹ This is, of course, an anachronism, as Ramhal and his works were quite

the relationship he has maintained with our medical students here at the University of Padua. Many of his family members and friends are among our graduates. Indeed, some of his most devoted friends, colleagues, vocal supporters, and advocates are our alumni, such as Moshe David Valle, Class of 1713, and Yekutiel Gordon, Class of 1732. Ramhal has written a poem in honor of one of our graduates here tonight, Yisrael Gedaliah Cases. I apologize that it is not included in the program due to a printer's omission.

In fact, Ramhal has written poems for many of our graduates, including Elia Consigli,⁶⁶ Emanuele Calvo,⁶⁷ and Elia Cesana.⁶⁸ He even wrote a poetic approbation for the work *Meilitz Yosher* of Yeshayah Roman,⁶⁹ who read three poems for our reunion today.

I now proudly introduce R. Moshe Hayim Luzzatto, who will speak to us about how an appreciation of nature, science, and medicine is essential in order to understand the ways of *Hashem*. He shared with me that he has been working on these ideas for some time and hopes that our learned audience will help refine and enhance his research.⁷⁰ [Unfortunately, the full text of Ramhal's speech did not survive.]

controversial at the time. It was only later in history that his writings became accepted and a ubiquitous staple of the Jewish library.

- 63 Modena and Morpurgo, Medici, 73, n. 184.
- 64 Ibid., 84, n. 224.
- 65 There is no broadside extant of this poem, but it appears in *Sefer Ha-Shirim*, 132. See Modena and Morpurgo, *Medici*, 85-86, n. 231.
- 66 Modena and Morpurgo, Medici, 80, n. 207; Sefer Ha-Shirim, 3.
- 67 Modena and Morpurgo, Medici, 80, n. 208; Sefer Ha-Shirim, 10.
- 68 Modena and Morpurgo, Medici, 80, n. 212; Sefer Ha-Shirim, 46.
- 69 Meilitz Yosher (Venice, 1730) is a commentary on the selihah "Ta Shema." The poem is reprinted in Sefer Ha-Shirim, 55.
- 70 The speech was ultimately incorporated in his *Derekh Hashem*, chapter 1. I thank my dear son Shmulie for this reference.

⁶² It is unclear if Ramhal himself attended the university, though many members of his family attended the University of Padua Medical School from the 17th to the 19th centuries.

In Memorium

While today we celebrate the accomplishments of our graduates, we take time to remember those who have passed on to the *Olam Ha-Emet*. While they are not necessarily graduates of our medical school, they have all played an integral role in our lives in many ways.⁷¹

Abraham Portaleone (d. 1612)72

Abraham Portaleone, a role model for all of us, came from a long line of physicians and graduated the University of Pavia in 1563.⁷³ He served as physician for the Dukes of Mantua, receiving special permission from Pope Gregory XIV to treat Christian patients. While he authored a number of medical works, it is his *Shiltei Ha-Gibborim* – which he composed later in life after suffering a stroke and lamenting that he had not devoted enough of his life to learning – that is an inspira-

⁷¹ There are broadside eulogies in the Valmadonna Collection for all those in this section, thus meriting their inclusion in our reunion program. In the online catalogue, the eulogies follow immediately after the medical student poems.

⁷² See #115 in the online broadside collection. On Portaleone, see H.A. Savitz, "Abraham Portaleone: Italian Physician, Erudite Scholar and Author, 1542-1612," Panminerva Medica 8(12) (December 1966): 493-5; S. Kottek, "Abraham Portaleone: Italian Jewish Physician of the Renaissance Period – His Life and His Will, Reflections on Early Burial," Koroth 8(7-8) (August 1983): 269-77; idem., "Jews Between Profane and Sacred Science: The Case of Abraham Portaleone," in J. Helm and A. Winkelmann (eds.), Religious Confessions and the Sciences in the Sixteenth Century (Brill, 2001). For a full text of his will, see D. Kaufman, "Testament of Abraham Sommo Portaleone," Jewish Quarterly Review 4(2) (January 1892): 333-41; A. Berns, The Bible and Natural Philosophy in Renaissance Italy (Cambridge University Press, 2014). Amongst the correspondence of Cantarini mentioned above, Shadal discovered a remarkable letter by Portaleone recounting his brush with death on February 25, 1576, when he escaped unscathed from a vicious attack. Although his cloak was perforated in sixteen places from the perpetrator's sword, miraculously no blood was drawn. See Y. Blumenfeld, Otzar Nehmad 3 (Vienna, 1860), 140-1.

⁷³ For a copy of the text of his diploma, see V. Colorni, *Judaica Minora* (University of Ferrara Press, 1983), 487-9.

tion to all of us.⁷⁴ The encyclopedic work was written for his children as a guide for proper religious prayer and observance,⁷⁵ focusing on the Temple service. It includes chapters on the musical instruments of the *Beit Ha-Mikdash*, the composition of the incense, and the details of the daily sacrifices. May his memory be a blessing.

R. Yehudah Aryeh De Modena (1571-1648)⁷⁶

R. De Modena was a well-known, colorful personality of the Italian Renaissance, involved in halakhic discourse, dialogue with non-Jews, choral music performance in his synagogue, and discussions about the propriety of gambling, amongst other endeavors. Many of us enjoyed his sermons on Shabbat, and we are very fortunate that he took special interest in our medical students.⁷⁷ He not only wrote poems for some of our medical graduates, but in one case he collected and published an entire volume of letters and poems dedicated to one of our best students, Joseph Hamitz, Class of 1623.⁷⁸ Modena later granted Rabbinic ordination to Hamitz.⁷⁹ Perhaps his most famous student was our illustrious graduate Yoseph Shlomo Delmedigo.⁸⁰ May his memory be a blessing.

I am presently reminded of Yehudah Aryeh's uncle,

⁷⁴ Not to be confused with a work on the Rif with a similar title.

⁷⁵ This work has recently been reissued in an expansive, copiously footnoted edition with introductory essays and biography. See Y. Katan and D. Gerber (eds.), *Shiltei Ha-Gibborim* (Makhon Yerushalayim, 5770).

⁷⁶ See #115 in the online broadside collection.

⁷⁷ See H. Adelman, "Leon Modena: The Autobiography and the Man," in M. R. Cohen, trans. and ed., *The Autobiography of a Seventeenth-Century Venetian Rabbi: Leon Modena's Life of Judah* (Princeton University Press, 1989), 30.

⁷⁸ See M. R. Cohen, ibid., 233; Ruderman, "The Diffusion of Scientific Knowledge," 100-2, with additional references in the index.

⁷⁹ Hamitz's kabbalistic works have been published in the modern era. See N.S. Leibovitz, *Seridim* (The Writings of R. Yosef Chamitz, including *Be-Leil Chamitz* by R. Yehudah Aryeh Modena) (Darom Books, 5697).

⁸⁰ On the relationship between De Modena and Delmedigo, see Ruderman, "The Diffusion of Scientific Knowledge," 118-52.

Avtalion Mi-Modena, who attended U of P Medical School as well. He was a man of singular intellect, mastering both Torah and medical knowledge. He was one of a number of our students who shuttled between the medical school and the yeshiva of the great Torah sage R. Meir Katznellenbogen (also known as Maharam Padua).⁸¹ We were particularly proud of this relationship, and throughout my career, I have strongly encouraged all of our students to maintain their Torah study along with their medical pursuits.

Abraham Catalano (d. 1642)82

Catalano was a physician whose sacrifice in treating patients during the plague (1630-31) is legendary. He documented his experience in his *Olam Hafukh*, which will hopefully be published someday. Sacatalano discusses one therapeutic approach to the treatment of plague that is of particular interest. He recounts that the Jewish community of Pisa would recite the biblical passage about the incense every Monday and Thursday during the epidemic to ward off the plague. May his memory be a blessing.

I would like to exercise the prerogative of the Master of Ceremonies and briefly elaborate on the use of incense for

⁸¹ See Judah Fano, Mikveh Yisrael (Venice 1607), 35a-36b.

^{82 #118} in the online catalogue. This elegy was written by Catalano's son, Moshe, who was a poet and prominent literary figure. What may be the manuscript version of this printed broadside was sold at auction August 18, 2015 (http://173.46.158.140/Listing/Details/769442/Kinah-R-Moses-Cattalano-Ramchal-others-Italy-19th-Century). The description reads, "Lamentation written on the death of Abraham Catalano by his son, Moses Catalano." I was unable to consult the manuscript to ascertain if it is indeed the same poem.

⁸³ The manuscript was only published in the mid-20th century. See Cecil Roth, *Kovetz al Yad* 4 (1946), 67-101. The manuscript from which Roth worked was sold at Sotheby's in October 2004.

⁸⁴ A. Berns, "Judah Moscato, Abraham Portaleone, and Biblical Incense in late Renaissance Mantua," in G. Veltri and G. Miletto, eds., *Rabbi Judah Moscato and the Jewish Intellectual World of Mantua in the 16th-17th Centuries* (Brill, 2012), 105 and 109.

the treatment of the plague. According to Ramban, the unique placement of the biblical description of the altar of incense, separate from the other vessels, is an allusion to the powers of incense to abort the plague. 85 This is borne out later, after the rebellion of Korah, when God unleashed a plague upon the people. Aharon was instructed to take the incense from the *Mishkan* and wave it amongst those stricken with the plague. The success in aborting the plague is recorded: "*Va-tei'atzar ha-magefah*." 86

A number of our colleagues recommend the recitation of the *pitum ha-ketoret* as a cure for plague.⁸⁷ The Ari *z"l* specifically prescribed the recitation of *pitum ha-ketoret* in times of plague.⁸⁸ As those of you who have read *Shiltei Ha-Gibborim* know, Abraham Portaleone went further and attempted to recreate the biblical recipe for the holy incense.⁸⁹

Please rise as our honoree Yitzhak Cantorini recites the *Kel Malei* prayer for the departed.

Conclusion

Thank you all for participating in our reunion. We are very fortunate here at the University of Padua that we can study and practice medicine while maintaining our strong connection to Judaism and Torah learning. Let us hope that our descendants who follow in our footsteps and choose medicine as a career path will be as fortunate and blessed as we are.

I would like to conclude by asking you to open up the copies of *Ma'aseh Tuvia* that you received today and turn to the introduction:

It should not enter the mind of any man in all the lands of Italy, Germany, and France to study the art of medicine without first mastering ("filling his belly") the written Torah,

⁸⁵ Ramban, Shemot 30:1.

⁸⁶ Bamidbar 17:13.

⁸⁷ A. Berns, ibid.

⁸⁸ Sha'ar Ha-Kavanot, Derush Tefillat Shaharit.

⁸⁹ Shiltei Ha-Gibborim, chapter 88 ff.

the oral Torah, and all its related wisdom...

You can stop at this point. 90 Bookmark this page and let it be a message and inspiration to us and to all future generations of Jewish physicians.

I look forward to seeing you again at our next reunion.

⁹⁰ The remainder of the passage praises Shlomo Conigliano, our narrator, whose students became rabbis and physicians to kings and princes.