

Is There Life After Life? Superfetation in Medical, Historical and Rabbinic Literature¹

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Case Report

On January 18, 2008 a unique medical case was reported in the British newspaper, the *Daily Mail*. Two babies were carried in the same womb, born only one minute apart, yet Thomas and Harriet Mullineux are not twins. They were conceived three weeks apart thanks to an extraordinary twist of nature. Their mother Charlotte had been pregnant with twins when at seven weeks she miscarried one of them. But two weeks later, she discovered, after undergoing a follow-up ultrasound, that she was carrying another fetus - conceived separately and still growing in her womb. The surviving twin and the new baby were born in May of 2007.

This case, which may represent an extraordinarily rare, and not well documented, phenomenon, is the substance of this brief essay. We shall address the medical, historical and halakhic aspects of this case.

Superfetation in Historical and Medical Literature

The process whereby a woman becomes pregnant and then subsequently conceives again during another ovulatory cycle is called

¹ A version of this article appeared in *Shalom Rav* (self-publication, 2008), a tribute volume to Rabbi Shalom Rosner formerly of Congregation Bais Ephraim Yitzchok (Woodmere, NY) upon his aliyah to Eretz Yisrael.

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superfetation. Superfetation has been discussed for centuries, and the possibility of conception during an existing pregnancy has been debated since antiquity. It was assumed to be possible by Hippocrates, Aristotle and Pliny. William Harvey reports that a certain maid, pregnant from her master, in order to hide her knavery, went to London, where she delivered a child in September. She then returned home. In December of the same year she was unexpectedly delivered of another child, assumedly a product of superfetation, which proclaimed the crime that she had so cunningly concealed before.² Modern medicine, however, remains skeptical of the possibility of superfetation.

One must distinguish between superfetation, whereby a woman already pregnant conceives again from a later ovulation, from what is termed superfecundation, when a woman ovulates two eggs during one cycle, yet there are two separate instances of fertilization, even possibly days apart. The possibility of superfecundation has been accepted since antiquity and clearly proven scientifically in the DNA age in cases when twins have been identified genetically as having two different fathers.³

²For an extensive review of the premodern sources discussing superfetation, see G. M. Gould and W. L. Pyle, *Anomalies and Curiosities of Medicine* (W. B. Saunders, 1896), 46-48. See also Y. V. O'Neill, "Michele Savonarola and the *fera* or blighted twin phenomenon," *Medical History* 18(1974), 222-239. Our discussion is about the possibility of natural superfetation. With the advent of assisted reproductive technologies, and the intentional introduction of reproductive seed or fertilized embryos at both different times and locations, the possibility of superfetation increases significantly. Hormonal manipulation further increases the possibility by reversing the body's normal mechanisms for preventing a second simultaneous pregnancy.

³The first scientifically proven case of superfecundation was recorded by G. K. Doring, 1960 (cited in O'Neill, op. cit., at note 67), but there have been a number of others subsequently. See, for example, E. Girela, et. al., "Indisputable double paternity in dizygous twins," *Fertility and Sterility* 67:6(June, 1997), 1159-1161. On superfecundation, see F. Rosner, "Superfecundation in mythology, history and poetry," *New England Journal of Medicine* 300(1979),49; D. Rabinerson, et. al.,

Proving superfetation beyond reasonable doubt, however, has remained elusive. Even in the modern age of ultrasound and DNA testing, it has not been unanymously accepted as possible. Modern reproductive physiology teaches that once pregnancy is achieved, it is generally not possible for a woman to conceive again subsequently until after the completion of the pregnancy. Once a first pregnancy is achieved, progesterone, secreted by the corpus luteum and then subsequently by the placenta, suppresses further ovulation and additionally makes the female reproductive tract much less receptive to male reproductive seed. It has been observed that twins are occasionally of significantly different sizes or weights and some consider this proof that they were conceived at different times. The size or weight disparity, however, is not sufficient proof, as there are a number of other medical conditions to which this can be attributed. A number of articles have appeared over the last few decades claiming to have confirmed superfetation with differing levels of confidence.⁴ However, an article from 2003 denies any possibility of superfetation and attributes all such cases to other phenomena.⁵

“Superfecundation and superfetation--the forgotten entities,” (Hebrew) *Harefuah* 147:2(February, 2008), 155-8. The most curious and convincing examples of superfecundation are those in which children of different colors, either twins or near the same age, are born to the same woman. Depending on the race of the parents, however, this phenomenon can be explained without resorting to the rare case of superfecundation.

⁴ For example, N. Baijal, et. al., “Discordant twins with the smaller baby appropriate for gestational age--unusual manifestation of superfetation: a case report,” *BMC Pediatrics* 7:2(January 19, 2007); A. Harrison, et. al., “Superfetation as a cause of growth discordance in a multiple pregnancy,” *Journal of Pediatrics* 147:2(August, 2005), 254-255; T. Steck and S. Bussen, “Conception during pregnancy (superfetation),” *Human Reproduction* 12:8(August, 1997), 1835-1836; J. Bertrams and H. Preuss, “A case of twins with probable superfetation,” (German) *Zeitschrift fur Rechtsmedizi* Journal of legal medicine 1980;84(4):319-21.

⁵ I. Blickstein “Superfecundation and superfetation: Lessons from the past on early human development,” *Fetal and Neonatal Medicine* 14:4(October, 2003), 217-219.

Despite the logical and scientific conclusion that superfetation is not possible, many such cases have been recorded throughout history. There are two approaches to these cases. Either they are all attributable to some other phenomenon, and indeed superfetation is impossible, or alternatively, despite scientific evidence to the contrary, superfetation is possible, although admittedly exceedingly rare.

Superfetation in Rabbinic Literature

The notion of superfetation is found in rabbinic literature and is first discussed in the Talmud.⁶

תלמוד בבלי מסכת יבמות דף יב עמוד ב

תני רב ביבי קמיה דרב נחמן, שלש נשים משמשות במוך: קטנה, מעוברת, ומניקה;
קטנה - שמא תתעבר ושמא תמות, מעוברת - שמא תעשה עוברת סנדל, מניקה -
שמא תגמול בנה וימות

The Gemara in Yevamot discusses three cases for which the use of a “*mokh*,” a form of contraceptive, is permitted.⁷ The common denominator of these cases is the concern that some medical harm that may result from a pregnancy. One of the three women permitted to use a *mokh* is one who is pregnant, lest her fetus become a *sandal*. Rashi *ad loc* describes a *sandal* as a malformed, non-viable

⁶ For previous discussions on this topic, see I. Jakobovits, *Jewish Medical Ethics. A Comparative and Historical Study of the Jewish Religious Attitude to Medicine and its Practice* (New York, Bloch Publishers, 1959), 325, n. 132; F. Rosner (Trans. and Edit.) *Julius Preuss' Biblical-Talmudic Medicine* (New York, Sanhedrin Press, Division of Hebrew Publ. Co. 1978), 386-87; D. M. Feldman, *Birth Control in Jewish Law: Marital Relations, Contraception and Abortion as set forth in the classic texts of Jewish Law*. (New York, New York University Press, 1968), 180-187; A. Steinberg, “Twins: Medical and halakhic perspectives,” (Hebrew) in A. Steinberg, ed., *Sefer Assia 2* (Schlesinger Institute, Jerusalem, 5741), 232-239; S. Kottek, “Twins in Jewish and historical sources,” (Hebrew) in A. Steinberg, ed., *Sefer Assia 2* (Schlesinger Institute, Jerusalem, 5741), 240-245.

⁷ The identity of a *mokh*, whether used before or after relations, and the nature of its contraceptive effect is a matter of rabbinic debate. This sugya is the main source of contemporary discussions on the permissibility of contraception in general. See

fetus with no recognizable human facial features.⁸ The simple explanation of this passage is that when a pregnant woman becomes pregnant subsequently with another child, one fetus will physically restrict the growth of the other, whose development will be retarded, resulting in a malformed fetus appearing like a *sandal*. This seems to accept the possibility of superfetation. Rashi indeed explains that the second pregnancy impedes the development of one of the fetuses, resulting in a gross malformation resembling a *sandal*, and a resultant miscarriage. Tosefot,⁹ however, argues against Rashi's position and points out that the Talmud Bavli explicitly rejects the possibility of superfetation. The relevant passage is found in Gemara Niddah 27a.

תלמוד בבלי מסכת נדה דף כז עמוד א

א"ר אבין בר רב אדא אמר רב מנחם איש כפר שערים, ואמרי לה בית שערים: מעשה ונשתהה וולד אחד אחר חבירו ג' חדשים, והרי הם יושבים לפנינו בבית המדרש. ומאן נינהו? יהודה וחזקיה בני רבי חייא. והא אמר מר: אין אשה מתעברת וחוזרת ומתעברת! אמר אביי: טיפה אחת היתה ונתחלקה לשתיים, אחד נגמרה צורתו בתחלת ז', ואחד בסוף ט'.

In this passage the Gemara recounts a story of two brothers who were born three months apart and subsequently survived, as evidenced by the fact that they were both students in the yeshiva to-

D. M. Feldman, *Birth Control in Jewish Law: Marital Relations, Contraception and Abortion as set forth in the classic texts of Jewish Law* (New York, New York University Press, 1968); M. D. Tendler, "Contraception and Abortion," in F. Rosner, ed., *Medicine and Jewish Law* (Jason Aronson; Northvale, NJ, 1993); J. D. Bleich, "B'sugya d'shalosh nashim," in his *B'Nitivot HaHalakha* 3 (New York, 5761), 1-4.

⁸ Most identify the *sandal* with the fetus compressus (compressed) or fetus papyraceous (flattened remarkably through loss of fluid and most of the soft tissue) described in the medical literature. See Preuss, 386 and Feldman, 183. See O'Neill, op. cit., 229 for a discussion of all the possible consequences of the death *in utero* of a twin fetus, including a description that would fit well with the Talmud's term *sandal*.

⁹ Yevamot 12b, s. v., *shema*.

gether at that time. In fact, these siblings were none other than the children of R' Chiya, Yehuda and Chizkiya. The Gemara then queries: How could this be possible, when Mar states that a woman cannot become pregnant again if she is already pregnant (i.e., superfetation is *not* possible). The Gemara responds that this was *not* a case of superfetation, rather, conception occurred at one time and the reproductive seed divided into two. One child was born at seven months gestation, while the other was born at nine months.¹⁰

If the Talmud Bavli explicitly rejects the possibility of superfetation, Tosafot asks, how could Rashi use this idea to explain why a

¹⁰ This explanation itself requires further elaboration. The word used is “*tipah*,” which usually refers to the male reproductive seed prior to fertilization. Splitting of the male seed is not physiologically possible, nor would it, by itself produce two embryos. If “*tipah*” refers to the embryo, which was split, then the brothers would have to be identical twins. Excluding superfetation, the simplest explanation is that two eggs were ovulated and fertilized, yet they were born at different times. This is a known, though uncommon, occurrence termed interval delivery in modern scientific terminology. This however would not explain the phrase, “*tipah achat hayta v' nechlikah l'shtayim*.”

There is a notion in *Chazal* that babies born in the seventh and ninth months are viable whereas those born in the eighth month are not (see, for example, T.B. *Shabbat* 135a and *Yevamot* 80a). This was a prevalent notion in antiquity and the Middle Ages. On the Jewish sources on this notion, see *Chazon Ish* Y. D., 155; A. S. Abraham, *Nishmat Avraham* (English) (Mesorah: Artscroll), vol. 1, 185, 228 and vol. 3, 244; Pieter W. Van Der Horst, “Seven Months’ Children in Jewish and Christian Literature from Antiquity,” in his *Essays on the Jewish World in Early Christianity* (Gottington, 1990), 233-47; Neria Gutal, “*Ben Shemona: Peshet Shitat Chazal B'nogaia L'vladot Bnei Shemona*,” *Assia* 55-56(1989), 97-111; Ron Barkai, “A Medieval Hebrew Treatise on Obstetrics,” *Medical History* 33(1988), 96-119, esp.101-104. For further information on the secular sources see Ann Ellis Hanson, “The Eight Months’ Child and the Etiquette of Birth: Obsit Omen!,” *Bulletin of the History of Medicine* 61(1987), 589-602; Sarah George, *Human Conception and Fetal Growth: A Study in the Development of Greek Thought From Presocrates through Aristotle* (Doctoral Dissertation, University of Pennsylvania, 1982), 204-233; C. R. King, “The eight month fetus: Classical sources for a modern superstition,” *Obstetrics and Gynecology* 72:2(August, 1988), 286-287; R. Reiss and A. Ash, “The eight month fetus: Classical sources for a modern superstition,” 71:2(February, 1988), 270-273.

pregnant woman may use a *mokh*. Tosafot answers that according to Rashi, the phrase “*ain isha mitaberet v’ chozeret u’ mitaberet*” does not mean that a woman cannot *conceive* subsequently if she is pregnant, rather, it means that even though she can conceive, the product of such a conception will not survive to viability, but will invariably be miscarried as a malformed *sandal*. Therefore, according to Rashi, it would appear that while superfetation is technically possible for conception, it is not possible for viability. Thus, the production of two healthy, viable children from superfetation, such as the sons of R’ Chiya, is not possible.

Rabbeinu Tam, however, maintains that even conception after existing pregnancy is not possible. (i.e., even superfetation for conception is not possible.) He therefore posits an entirely different explanation as to why a pregnant woman may use a *mokh*. According to Rabbeinu Tam, if a woman is pregnant with twins, and has relations with her husband, it is possible the male reproductive seed alone may interpose between the two fetuses and cause one to be malformed in the shape of a *sandal*.

While the Talmud Bavli clearly maintains that “*ain isha mitaberet v’ chozeret u’ mitaberet*,” which is variously interpreted by Rashi and Rabbeinu Tam as either superfetation is not possible at all, or it is possible only for conception, but not to viability, the position of the Talmud Yerushalmi appears to be otherwise.

The passage from the Yerushalmi below seems to explicitly affirm the possibility of superfetation.¹¹

תלמוד ירושלמי מסכת יבמות פרק ד דף ה טור ג/ה"א

מה אנן קיימין אם בשבא עליה לאחר מיתת בעלה מיד הוכר עוברת לאחר שני חדשי' ניתני בן ט' לזה ולזה בן ז' לזה ולזה אלא כן אנן קיימין כשבא עליה לאחר שני חדשי' והוכר עובר' לאחר ג' חדשים ניתני היבמה לא תחלוץ ולא תתיבם עד שיהו לה חמשה חדשים אלא כן אנן קיימין כשבא עליה לאחר ארבעים יום והוכר עוברת לאחר חמשים יום הרי יש כאן שלימין לראשון ומקוטעין לשני ש"מ

¹¹ Jacobovits n. 132, p. 325; Preuss, 387. Both interpret the Yerushalmi as limiting the possibility of superfetation to coitions that occur within forty days of each other.

שהאשה יולדת לחדשים שלימים את שמע מינה שהן שתי יצירות את שמע מינה
 שהאשה יולדת לחדשים מקוטעין את שמע מינה שהאשה מעוברת וחוזרת
 ומתעברת את שמע מינה שהאש' אינה מתעברת משני בני אדם כאחת ופליגא על
 דרבנן דאגדתא דרבנן דאגדתא אומר' ויצא איש הביניים ממערכות פלשתים ממאה
 ערלות פלשתים שהערו בה מאה ערלות פלשתים אמר רבי מתנייה ולא פליגין עד
 שלא נסרח

However, this reading is not accepted by all. The *Korban HaEdah* on the Yerushalmi amends the text to read that a pregnant woman *cannot* again become pregnant, in consonance with the Talmud Bavli. Rabbi Chaim Yosef David Azulai, while not amending the text of the Yerushalmi, nonetheless concludes that the statement, “*at shema mina she-ha’isha mitaberet v’chozeret u’mitaberet*” means that a woman may indeed be able to conceive during pregnancy, but only a non-viable fetus would result, similar to the position of Rashi. Based on his reading of other passages in the Yerushalmi¹² he maintains that the Yerushalmi does not accept the possibility of superfetation with the birth of a healthy, living viable second child.

In *Sefer Chasidim* by R’ Yehudah HaChasid (12th century) it is written that within forty days a woman can become pregnant from two men. This appears to be referring to a case of superfetation, where a woman can become pregnant from one man, then subsequently become pregnant from another man.¹³

In the 15th century R’ Shimon b. Tzemach Duran mentions a case of superfetation in the course of answering a query on the laws of *niddah*:

A sage testified that he saw [the case of] a woman in Rome who gave birth to a child and, after four months, went into labor and gave birth to another child. When they brought her

¹² Especially *Niddah* Chapter 3, p. 51, *halakhah* 4.

¹³ Alternatively, it may be referring to another case discussed in the Gemara about the possibility of a woman conceiving one child who is the product of two fathers. This notion merits its own analysis.

before the Great Church for an explanation, she declared that when she was in her fifth month of pregnancy, she cohabited with another and became pregnant by him; the first child, she said, is her husband's and the second another's. They accordingly "stoned" her. This case was listed in the medical books to show that the retentive power of the womb [can be very strong] and that there are women who, however, are inordinately weak and miscarry.¹⁴

In the early 18th century, R' Yitzchak Lampronti, Rabbi/physician, graduate of the University of Padua, writes in his encyclopedia *Pachad Yitzchak*,¹⁵ that occasionally a pregnant woman may again conceive and achieve a second pregnancy. This seems to go against the conclusion of the Talmud Bavli. However, a closer reading reveals that R' Lampronti is referring here to superfecundation, as opposed to superfetation. He brings proof to his comment by citing a case from America of a woman who bore twins one after another, but the twins were of different colors, assumedly from different fathers. This more likely refers to a case where the woman engaged in relations with two different men within a short period after she ovulated two eggs, each egg being fertilized by a different man. As discussed above, superfecundation, as this is called, has been accepted since antiquity and scientifically proven in modern medical literature.

¹⁴ Translation by Feldman, op. cit.

¹⁵ S.v., *m'uberet*. On R' Lampronti, see D. Ruderman, "Contemporary science and Jewish law in the eyes of Isaac Lampronti and some of his contemporaries," *Jewish History* 6:1-2(1992), 211-224; D. Margalit, "R' Yitzchak Lampronti: Rabbi, physician, lexicographer," (Hebrew) in his *Chakhmei Yisrael k'Rofim* (Jerusalem, Mosad Harav Kook, 5722) 152-174; H. Savitz, "Dr. Isaac Lampronti: Rabbi, physician, teacher, preacher, encyclopaedist," in his *Profiles of Erudite Jewish Physicians and Scholars* (Chicago, Spertus College, 1973), 29-32. For a collection of all the medical matters in R' Lampronti's magnum opus see D. Margalit, "Medical articles in the encyclopedia Pahad Yitzchak by R. I. Lampronti," (Hebrew) *Koroth* 2:1-2(April, 1958), 38-60.

Abraham b. Mordechai Halevi (Cairo, 17th cent) ponders the halakhic implications of the Talmudic statement, “a woman cannot conceive if already pregnant,” and assumes it is not an absolute statement, but rather a reflection that superfetation is an extremely rare occurrence. Thus, he is willing to invoke its possibility in selective halakhic circumstances.¹⁶ For example, with respect to *tumat leidah* (the impurity associated with childbirth), if a woman gives birth to a second child shortly after the first, he would assume the more common circumstance that the two pregnancies were conceived at the same time. Therefore, a woman need not begin a new counting of days of impurity. However, regarding possible danger to a pregnant woman, he would be concerned about the small possibility of superfetation and its impact on the existing fetus, and would allow use of a contraceptive *mokh*. It is Rabbi Halevi’s third case that spawned a lengthy response by R’ Chaim Yosef David Azulai (known as *Chida*).¹⁷ In this theoretical test case Rabbi Halevi states that if a woman gives birth very shortly after her husband leaves for a long journey, and then gives birth again some months later (seven or nine), we may exonerate the wife of any possible wrongdoing by assuming that she conceived again while pregnant. Consequently, the second child, as the first, is a product of her husband. This presupposes not only that a woman can conceive while pregnant, but assumes superfetation with a subsequent live birth.¹⁸

It is this last presupposition with which the *Chida* takes issue. Rav Azulai engages in a lengthy review of the halakhic literature relating to the notion about whether a pregnant woman can again become pregnant and concludes that although there are debates about the possibility of conceiving while pregnant (see the foregoing), none of

¹⁶ *Gan HaMelech*, 130, in *Ginat Veradim*.

¹⁷ *Birkei Yosef*, E. H., 4:8.

¹⁸ Rabbi Halevy’s case assumes the wife conceived while in her later stages of pregnancy and gave birth to the second child seven or nine months after the delivery of the first. Even modern science does not record or acknowledge this extreme case of superfetation.

the rabbinic authorities accepts the possibility of superfetation with subsequent live birth of both fetuses, an assumption made by Rabbi Halevi in his third case.

Rav Azulai mentions two major areas where the issue of superfetation is discussed in rabbinic literature. One is the passage in *Yevamot* above. He notes that even though Rabbeinu Tam maintains that conception after pregnancy is not possible, he acknowledges that according to Rashi conception is indeed a possibility. However, even according to Rashi, if superfetation did occur, one of the fetuses would certainly become a *sandal* and be severely malformed and non-viable. Even Rashi would concur that the birth of two healthy children through superfetation is impossible. Rather, the talmudic phrase “*ain isha mitaberet v’chozeret u’mitaberet*” is to be interpreted to mean that a pregnant woman cannot have a viable second child from superfetation.

The other area that Rav Azulai discusses in order to prove that superfetation with the birth of viable children is rejected by all *Rishonim* is a case of twins where one dies prior to thirty days, and the other survives. In general, a child who dies prior to 30 days after birth is considered a *nefel*, a non-viable child, and no mourning practices are observed. However, if there is strong evidence that it was a viable child, mourning may be required. In a case of twins, if one child survives, it may reflect upon the status of the other twin, who may likewise be considered viable, even though death occurred prior to 30 days. As such, mourning for the deceased twin may be required. This is indeed the position of the *Rashbatz*, as cited by R’ Azulai, that mourning for the deceased twin is required despite the occurrence of death prior to thirty days.¹⁹ This argument presupposes that the twins were conceived at the same time. In fact, the *Rashbatz* cites the passage in the Bavli that “*ain isha mitaberet v’chozeret u’mitaberet*” as proof to his position. If, however, one assumes that a pregnant woman can again conceive at a later time, it

¹⁹ See Y. Baumel, *Emek Halakha* 1:5 for further discussion of the case of mourning for twins.

is possible that the child that died prior to 30 days was indeed of an earlier gestational age and was in fact not viable. Mourning would thus not be required.

R' Yosef Karo codified a variation of this case in his *Shulchan Arukh*, but the questionable integrity of our printed text has led to much debate about its interpretation.²⁰ The printed text reads: There are some who say in a case of twins- If one dies within thirty days, and the second twin lives, *and dies*, after thirty days, we do not mourn for him.

According to this version, if the first twin died before thirty days, and the second died after thirty days, we do not mourn even for the twin that lived longer. The *Levush* (as cited in the *Taz*) explains that if the second twin is ill at the time of the first twin's death, since they both derive from the same conception, both are considered non-viable, and mourning is not required even for the older twin. The *Taz* is in wonderment of this decision, as how could one refrain from mourning for a child that survived more than thirty days, whatever the circumstances may be? He maintains that the original source of this halakha was not a case of neonatal death of the second twin, rather, the second twin survived. He maintains that the word "*vamet*" (and dies) should be removed from the text. In this case, the halakha states that even though the second twin survived, mourning is not required for the *first* twin who died before thirty days. While the *Taz* argues convincingly that this is clearly a more logical alternative than that of the *Levush*, this decision is not consistent with the logic and decision of the *Rashbatz* cited above, who would require mourning for the first twin, even if he died within thirty days, based on the notion that "*ain isha mitaberet v' chozeret u' mitaberet.*"

While Rabbi Azulai railed against Rabbi Halevi for accepting the possibility of superfetation (with the birth of two healthy children), one of his close friends and colleagues, Rabbi Yom Tov Algazi, seems to have accepted the possibility as well. In Rabbi Yom Tov

²⁰ Y. D. 374:9 and commentaries *ad loc.*

Algazi's commentary on the Ramban's work on *Hilchot Bechorot*,²¹ he questions the pronouncement of the Talmud Yerushalmi that one can fulfill the mitzvah of *pru urvu* through the birth of a mamzer.²² As the mitzvah could only be accomplished through illicit, biblically forbidden relations, the mitzvah should be nullified under the rule of *mitzvah ha-ba b'aveirah* (a mitzvah performed through the violation of a Torah prohibition). Rabbi Algazi offers a novel case that would allow the fulfillment of the mitzvah despite the production of a mamzer. If a man's brother dies childless, he is required to perform *yibum*. However, one must wait three months after his death (the time frame defined in the Talmud by which it would be physically apparent that a woman is pregnant) lest his wife be pregnant, in which case *yibum* may not be required.²³ In this case, the surviving brother waited the requisite three months, but, despite physical appearance to the contrary, the wife turned out to be pregnant. The resultant child of their union would be a mamzer, but the brother's act, which was an *ones* (purely accidental and unforeseen), was not in violation of any prohibition. Therefore, this would not fall under the umbrella of *mitzvah ha-ba b'aveirah*.

In the 1910 edition of the journal *Vayelaket Yosef*, Rabbi Yisrael Klein questioned the solution of Rabbi Algazi on the grounds that the Talmud clearly states in *Niddah 27* that a pregnant woman cannot conceive again. How is it possible then for a woman three plus months pregnant to conceive a second child that will be born as a mamzer? Rabbi Klein was unable to find a satisfactory answer to his question and left the issue unresolved.

²¹ Rit Algazi on Chapter 8 of Ramban *Hilchot Bechorot*, published in the back of the Vilna Shas *Bechorot*, p. 56, column 4, s. v. *ulam*. See Yerushalmi *Yevamot*, Chapter 2.

²² Rabbi Algazi addresses the debate as to whether the statement of the Yerushalmi that one can fulfill the mitzvah of *pru urvu* is definitive or left unanswered.

²³ The child would have to be born alive to preclude *yibum*. Pregnancy alone is not sufficient, as the Torah states "*uben ain lo*."

Some years later, Rabbi Ephraim Billitzer recounted Rabbi Klein's question and provided a creative solution.²⁴ According to Rabbi Billitzer, in the case discussed by Rabbi Algazi the man who died had two wives. The surviving brother performed *yibum* with one wife after three months, but the other wife was subsequently found to be pregnant, obviating the need for *yibum*. Thus, there would be no concern about superfetation, no case of *mitzvah ha-ba b'aveirah*, as it was an *ones*, the resultant child would be a mamzer, and the mitzvah of *pru urvu* would be fulfilled.²⁵ Rabbi Billitzer acknowledges that this key fact that the man had two wives is not specifically mentioned in the text by Rabbi Algazi. While this is indeed a clever solution, it appears to be a case of *ikar chaser min hasefer*.

I would humbly suggest a different possible solution to the question posed by Rabbi Klein. While it is true by all accounts that the Talmud Bavli rejects the possibility of superfetation (with the birth of two healthy children), as Rabbi Algazi's close friend, Rabbi Azulai, convincingly proves, however, Rabbi Algazi's entire discussion revolves around a passage in the Yerushalmi (that one can fulfill the mitzvah of *pru urvu* through the birth of a mamzer). The Yerushalmi appears to explicitly reject the opinion of the Talmud Bavli,²⁶ and accepts the possibility of superfetation. Therefore, the original question of Rabbi Klein in *Vayelaket Yosef* does not apply.

The notion of superfetation also arose in another context in the 18th century. It was not always clear throughout history how twins were formed embryologically. For example, some maintained that twins could not be formed from one marital act, while others believed that one act could create multiple births. This issue finds its expression in a homily of Rav Yonatan Eyebeschütz and serves as

²⁴ *She'ailot U'Teshuvot Yad Ephraim* E. H., 1.

²⁵ Rabbi Billitzer does find a possible allusion to it based on a turn of phrase of the Rit Algazi.

²⁶ Rabbi Azulai, *op. cit.*, is of the opinion that even the Yerushalmi rejects the possibility of superfetation with the birth of two healthy children.

the basis of a question of suspicion of infidelity posed to Rabbi Yechezkel Landau.

In discussing the lineage of David Hamelech, Rabbi Eyebeschutz queries why the progeny of the union of Yehuda and Tamar should be considered tainted.²⁷ After all, prior to *matan Torah*, the obligation of *yibum* devolved upon the father as well as on the brother. Therefore, Yehuda was fulfilling a mitzvah through his union with Tamar and the resulting progeny should not only be free of stain, they should be considered superior. To answer this question, Rabbi Eyebeschutz posits that only the first coition fulfills the mitzvah of *yibum*, and furthermore, twins cannot be born of one coition, but rather require two. As a result, only the first of the twins, who was conceived through the process of a mitzvah, is associated with royalty. The second twin however, would be susceptible to stain.

It is this notion of the requirement of two coitions to produce twins that was read and integrated by an eighteenth century European businessman. Prior to his departure on a long journey, this man engaged in marital relations with his wife. Upon his return some months later, his wife gave birth to twins. Remembering the homily of Rabbi Eyebeschutz, he assumed his wife must have been unfaithful and approached Rabbi Yechezkel Landau for rabbinic advice.²⁸

Rabbi Landau roundly criticizes the questioner and dismisses out of hand the scientific ideas discussed in Rabbi Eyebeschutz's essay. He further adds that not only are two coitions not required to produce twins, rather, based on talmudic passages (cited above), sequential coitions could not produce two viable twins, as one would invariably become a *sandal*. Here Rabbi Landau invokes the talmudic dictum that superfotation (with the subsequent birth of two viable children) is not possible. In fact, as discussed above, while superfotation is debated, the possibility of superfecundation is universally accepted. Twins could indeed be produced through sequential coitions in a case of superfecundation.

²⁷ *Yaarot Devash* (Lvov, 5623), 100a.

²⁸ *Nodah biYehuda Tinyana* E. H., 81.

Conclusion

For centuries the rabbis have debated the possibility of superfetation, and while some have accepted it as a possibility, the Talmud Bavli, by most accounts, clearly rejects the possibility of superfetation with viable progeny. There are a number of passages in the Talmud that seemingly conflict with our modern understanding of science, and numerous approaches have been developed to address them.²⁹ The passages discussing superfetation, until now, have not been numbered amongst them. It has not been possible to determine with absolute scientific certainty that superfetation is possible. How are we to view the current case report from England? Will this current case cause us to add the talmudic discussions on superfeta-

²⁹ The phrase that has been used to resolve these apparent conflicts is *nishtaneh hateva* (nature has changed). For treatment of this fascinating and complex topic see A. Steinberg, (F. Rosner, trans.), *Encyclopedia of Jewish Medical Ethics* (Feldheim, 2003), s.v. "change in nature"; D. Frimer, "Kevi'at Avhut al yedei Bedukat Dam be-Mishpat ha-Yisraeli u-be-mishpat ha-Ivri," in M. Halperin, ed., *Sefer Assia* 5 (Jerusalem, 1986), 185-209; D. Cohen, "Shinuy Hateva: An Analysis of the Halachic Process," *Journal of Halacha and Contemporary Society* 31 (Spring 1996); S. Sprecher, "Divrei Chazal ve-Yedi'ot Mada'iyot," *B.D.D.* 2 (Winter 1996), 2-39; S. Sternberg, "I. M. Levinger, *Ma'or le-Massekhet Hullin u-le-Massekhet Bekhorot*," *B.D.D.* 4 (Winter 1997), 81-102 (English section); Z. Lev, "*Neria Moshe Gutal, Sefer Hishtanut ha-Teva'im be-Halakhah*," *B.D.D.* 4 (winter 1997), 81-96 (Hebrew section); A. Carmell, M. Goldberger, and S. Sternberg, comments and response on Sternberg's earlier book review *B.D.D.* 6 (Winter 1998), 57-84 (English section); N. Gutal, "*Hishtanut Teva'im*," *B.D.D.* 7 (Summer 1998), 33-47; D. Malach, "*Hishtanut ha-Tevai'im ki-Pitronot le-Stirot Bein Dat le-Mada*," *Techumin* 18(5758), 371-383; Yehuda Levi, *The Science in Torah: The Scientific Knowledge of the Talmudic Sages* (Feldheim, 2004); N. Slifkin, *Mysterious Creatures* (Targum Press, 2003), 17-41; M. Halperin, "Science and medicine in the Talmud: *kabbalah o actualia*," *Assia* 71-72 (January, 2003), 90-102; R' Eliezer Roth, "Did Rambam really disagree with Chazal in matters of medicine?" response to Dr. Levinger *Assia* 71-72 (January, 2003), 87-89; S. Z. Leiman, "R. Israel Lipshutz and the mouse that is half flesh and half earth: A note on Torah U-madda in the nineteenth century," in *Chazon Nachum* (New York, Yeshiva University Press, 1997), 449-458; N. Gutal, *Sefer Hishtanut ha-Teva'im be-Halakhah (Machon Yachdav, Jerusalem, 5758)*.

tion to the list of passages that seemingly conflict with our modern understanding of medicine, or, like its predecessors in recent medical literature, will the gestational disparity be attributed to another medical phenomenon?³⁰ We reserve judgment while we await the final scientific analysis of this case. While advances in DNA testing and ultrasound have significantly enhanced our ability to assess the phenomenon of superfetation, the definitive study of this phenomenon remains a desideratum.

³⁰ There are features of this case that make it more convincingly a case of superfetation as, according to reports, an ultrasound was performed when the younger twin was at a very early gestational age. This precludes the possibility of confusing this with, for example, a twin-twin transfusion or severely size-discordant twins from other causes.

