## LETTERS TO THE EDITOR

## Gestational Surrogacy

THE NEW REPRODUCTIVE Technologies of the last few decades (see, e.g., J. Loike and Moshe Tendler, "Gestational Surrogacy," Hakirah 16) have brought the blessing of children to millions of couples who would have otherwise remained childless. But these blessings have not arrived without accompanied halakhic controversies. For example, there was originally the suggestion that children created through in vitro fertilization (IVF) have no yihus relationship to their genetic parents. Virtually all contemporary poskim, however, have concluded that married couples may use IVF to overcome infertility and that the egg and sperm providers do have a parental relationship (vibus) with an IVF-generated offspring.

Other IVF-related *yihus* questions remain an ongoing controversy. The most prominent of these is the question of who is the halakhic mother when the genetic and gestational mothers are different, as

in the case of egg donation or surrogacy.<sup>1</sup> Another controversy is the *yihus* status of a child created after the sperm provider has died.

Currently on the horizon is a new leap in reproductive technology that will bring along with it new *yihus* questions. It may take decades, if ever, for a child to be born through this technology, but many of the associated questions are already obvious.

The scientific basis for this new technology is as follows: The cells in our bodies are constantly dividing, and as they do they remain the type of cell they were: heart cells divide into heart cells, skin to skin cells, etc. But all of our cells begin with one cell-a fertilized egg-that for a short while does not differentiate into different types of body cells as it divides. These are "pluripotent stem cells," capable of becoming any kind of specialized cell. Stem cells offer great promise in medicine. If we understand how stem cells become differentiated, it might be possible to "grow" needed parts-heart muscle, livers, etc.-

conversion all would agree that the child retains *yihus* to its genetic father, see Yitzchak Avi Roness and Joel B. Wolowelsky, "A Convert Who is a Jew from Conception," BDD (*Bekhol Derakbekha Da-ehu, Journal of Torah and Scholarship*). 32 (2017), 7–14.

<sup>&</sup>lt;sup>1</sup> In the case of a Jewish couple using a non-Jewish surrogate, the Jewish status of the child hinges on the halakhic debate on whether the genetic or gestational mother is the haklakhic mother. Those who hold the gestational mother is the halakhic one would say that the child is not Jewish and needs conversion. For the argument that after such a

from stem cells without relying on organ donors, or to repair a torn spinal cord.<sup>2</sup>

The simplest source of stem cells are embryonic ones that have not yet differentiated. However, under pressure of ethical concerns, scientists have looked into the possibility of "inducing" adult differentiated cells to revert to their pluripotent state. And, indeed, there has been promising success in doing so. Pluripotent stem cells are the foundation on which cloning technology is based.3 Cloning of many mammals is now possible, and an entire industry has developed around the cloning of farm animals and livestock.4

As harvesting pluripotent stem cells has become more available, scientific research is now focused

https://stemcellthemagazine.com/ 2018/08/how-stem-cell-cloning-

works/. <sup>4</sup> See, for example,

https://www.bio.org/sites/default/ files/files/Cloning\_onepager.pdf.

<sup>5</sup> See, for example, Easley CA, Simerly CR and Schatten G. Gamete derivation from embryonic stem cells, induced pluripotent stem cells or somatic cell nuclear transfer-derived embryonic stem cells: state of the art. Reprod Fertil Dev. 2014 Dec; 27(1):89-92. doi: 10.1071/RD14317. available at https://www.ncbi.nlm.

nih.gov/pmc/articles/PMC4346179;

on techniques to control the development of the stem cell to the desired differentiated cell. Part of this science involves induction of these cells to become gametes, either egg or sperm. As a result, a new laboratory technology—in vitro gametogenesis (IVG)—is developing. IVIG is already far along in mice and could eventually allow for the creation of human sperm or oocytes (eggs) from, say, the skin cell of a person.<sup>5</sup>

It is clear how the availability of so-called "artificial gametes" (i.e., gametes generated by manipulation of their progenitor's somatic cells) would be a blessing for infertile couples. Even with the widely used technologies that are in use today, men with no sperm (azoospermia) and women with no eggs (ovarian failure/menopause) cannot be

and Hendriks S, Dancet EA, van Pelt AM, Hamer G, Repping S. Artificial gametes: a systematic review of biological progress towards clinical application. Hum Reprod Update.2015 May-Jun; 21(3):285-96. doi: 10. 1093/humupd/dmv001.Epub 2015 Jan 21; and Smajdor A and Cutas D, Background Paper: Artificial Gametes. Nuffield Council on Bioethics, December 2015, Section 5.3.1, available at http://nuffieldbio ethics.org/wp-content/uploads/ Background-paper-2016-Artificial-gam etes.pdf; and Cohen IG, Daley GQ, and Adashi EY. Disruptive reproductive technologies. Sci Transl Med. 2017 Jan 11;9(372). pii: eaag2959. doi: 10.1126/scitransl med.aag2959, available at http:// stm.sciencemag.org/content/9/372/eaag2959.

A basic overview of stem cells and their potential uses presented by the National Institutes of Health can be found at https://stemcells.nih.gov/info.htm.
<sup>3</sup> See, for example,

helped except with the use of donor sperm or donor eggs. With IVIG, however, there would no longer be a need for donors; even couples with these difficult conditions could attain full genetic parenthood.

Assuming the safety of the process is assured, there seems little reason to anticipate any new hesitations beyond those associated with IVF. As long as the technique is used to create artificial sperm from a male and artificial oocytes from a female, we can anticipate wide acceptance, at least over time. Of course, current research hesitatingly anticipates creating artificial oocytes from a male and artificial sperm from a female!<sup>6</sup> And this is where the ethical problems abound.

The implications for same-sex couples is clear. One partner of a lesbian couple could provide an artificial sperm and the other an egg. The child would be genetically related to both, but is she *halakhically* related to both? Is a halakhic father the provider of the sperm or is there perhaps no halakhic father here?

In the case of a male homosexual couple, one man could provide an artificial egg and the other the sperm. (They would need a female surrogate to carry the pregnancy. Let us assume she is Jewish to avoid a question of the Jewish status of the child.) Are both men the halakhic fathers of the child? If one were a Kohen, would the child inherit that status? Would it matter which man were the Kohen?

It is not relevant here that halakha opposes same-sex marriages, or that there are many secular ethical and halakhic reservations associated with artificial gametes in general. (Indeed, there is broad support for regulating the clinical implementation of these reproductive techniques.<sup>7</sup>) Once it becomes possible, we can be sure that some people will make use of it. And soon there will be a Jewish baby whose *yihus* status is to be determined. It's not too soon to give thought to the issue and its associated questions.

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## Conditional Marriage

I HAVE BEEN WONDERING why the practice of conditional marriage to avoid problems of *igun* due to *halitzah* refusal—which had been so much discussed between the fifteenth century and the nineteenth century—had virtually ceased. I had ascribed this to medical improvements and to the acculturation of

<sup>&</sup>lt;sup>6</sup> See, for example, Henry T. Greely, *The End of Sex and the Future of Human Reproduction* (Harvard University Press, 2016), "Cross-Sex Gametes," pp. 131– 135.

<sup>&</sup>lt;sup>7</sup> Hendriks S, Vliegenthart R, Repping S, Dancet EAF. Broad support for regulating the clinical implementation of future reproductive techniques. Hum Reprod. 2018 Jan 1;33(1):39–46. doi: 10.1093/humrep/dex355.

the Jewish society. Nevertheless, World War II and the latter wars in Israel have certainly created problems of *igun* due to women waiting for *halitzah* from their husbands' minor brother, a missing or imprisoned brother, or a brother whose whereabouts are unknown. There was also a case of a brother blackmailing the widow for a large sum of money before he would perform *halitzah*. In fact, the problem of *halitzah* was raised a number of times during the twentieth century:

- 1. R. Eliahu Bekhor Hazan (1848 - 1908)in responsa Ta'aloumot Lev III (Alexandria 1903) n. 48-in a case in which the whereabouts of a brother "yavam" was unknown-suggests that to avoid suffering and transgression, two famous rabbis should join in endorsing his opinion, to rely on the lenient rulings of R. Akiba Eger, R. Ezekiel Landau and R. Moses Sofer.
- 2. R. David Tzvi Hoffman (1843– 1921) has a response in Melamed le-Hoil III (1926) n. 51 addressed to the Chief Rabbi of Belgrade. The Chief Rabbi of Belgrade wanted to adopt a general tnai kiddushin (condition) that would nullify the kiddushin when a widow falls to her brother-in-law (the yavam). R. Hoffman was not ready to accept this as a general rule as it would completely nullify halitzah. If the most important

rabbis of the time agreed, however, he would support a ruling allowing those who wish, to give conditional kiddushin that specifies: if the husband dies without descendants and the brother refuses to give halitzah within a year, and the rabbi of the community sets down in writing that he was unable to induce the yavam to give a halitzah, then, and only then, would the kiddushin be nullified retroactively. The procedure should follow the guidelines of Noda bi-Yehuda and Hatam Sofer. Therefore, the condition should be repeated before the seclusion (vihud) even if according to the present rules of etiquette, it seems difficult to repeat the conditions at the beginning of the wedding night. His master R. Moses Schick (1807-1879) had already accepted this slight adaptation.

3. In Algeria they had an additional clause, printed in the *Ketubah*, under the signatories of the *Ketubah*:

> אנחנו עדים חתומים מטה, בפנינו נעשו סדורי קדושי האשה על ידי בעלה, הנזכרים למעלה ועל זה התנאי ששמענו מפיו: אם אשאיר אחרי זרע של קיימא, קדושין אלו יהיו קדושין ואם לא אשאיר אחרי זרע של קיימא, קדושין אלו יהיו בטלין מעיקרן ואם אשאיר אחרי זרע של קיימא, קדושין אלו יהיו קדושין וחתמנו בזמן ובמקום הנזכרים לפנים בכתובה זו.

> The witnesses of the *Ketubah*, signed again under this clause. These arrangements seem to

have been valid in Algeria, after the war under Chief Rabbi M. Eisenbath. It was probably a reaction to the widespread acute and insolvable problem of blackmailing. The solution was radical and it was exactly what R. David Tzvi Hoffman wanted to avoid. The solution eliminated any possibility of *halitzah*, and even affected any marriages in which the wife or the *yavam* predeceased the husband. It was the price paid for the simplicity of the solution.

 Finally, I want to mention the publication in 1966 by Mossad ha-Rav Kook of the book *T'nai* be-Nissuin u-be-Get by R. Eliezer Berkowitz (1908–1992). Despite R. Menahem Kasher's (1895–1983) polemic, and his effort to prevent its publication, the book is the best and most comprehensive study ever written on this subject. Of special interest, for our purposes, are pp. 25–51.

I would also like to point out that R. Moshe Sofer, in justifying the principle of conditional marriage, wrote in responsa, *Hatam Sofer, Even ha-Ezer II* n. 68:

> ...שזה שייך בחשש נדרים ומומים וכיוצא בו. אבל הכא שכל עיקרה לא באתה אלא להתנות להציל עצמה מזיקה, למאי ניחוש לדברים שאין הדעת סובלתן. ומכל מקום לחומרא בעלמא אנו אומרים ומפרשים בשעת התנאי שיהיו כל הבעילות בעילת זנות בביטול התנאי, שאין כאן בית מיחוש כלל.

Hatam Sofer thus accepted that the woman will never renounce the condition and therefore all the precautions are superfluous. The groom does not have the capacity to denounce the clause. (In addition to the opinion of Noda bi-Yehuda, see the complementary opinions of Rabad and Rashba in *Kessef Mishneh* and *Lehem Mishneh* on Rambam, *Ishut* 7:23). I suppose R. Amital emulated the procedure and the contract of Hatam Sofer to avoid the criticism of possible opponents.

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