

THE KOSHER CHILD

The ability to influence, or even outright select, the sex of our offspring has been a goal of mankind for centuries. In Jewish religious treaties methods are offered which allegedly can shift outcomes in favor of either a female or male child. Other religions suggest similar approaches to the problem and have obviously influenced lay opinion and created a folklore which penetrated all societies around the globe.

Fertility centers face requests for sex selection all the time. Until recently, there was, however, not much we had to offer. Since it is the semen that determines whether an offspring is female or male, some people pursued various sperm processing techniques, which claimed to preferably select either X-chromosome or Y-chromosome semen. An abundance of X-chromosome sperms would, of course, lead to more females, while a majority of Y-chromosomes would result in a predominance of males.

Unfortunately, none of these methods worked very well and, if a sex predominance did, in fact, occur, it was very minimal.

Paradoxically, most fertility specialists liked it this way! It allowed to avoid a major ethical problem, even if we gave in to our patients' demands for sex-selection. Since sex-selection did not work well, it did not end up affecting the male/female sex ratio in a statistically significant way. Physicians, therefore, did not have to face the difficult question whether we, in fact, are ready to pursue sex selection at will. If applied

on a large enough scale, successful sex-selection, of course, could result in rather significant demographic consequences.

Such consequences are already seen in China and India where, according to recent reports in The New York Times, a clear shift in favor of male births has taken place as a consequence of selective female abortions. In the U.S. and in most of the Western world, sex-based elective abortions are, of course, frowned upon.

However, modern science now allows us to perform much more effective sex selection. In fact, if couples are willing to go through IVF, we can sex embryos absolutely accurately and transfer only the desired sex into the uterus. This procedure, called preimplantation genetic diagnosis, or PGD, is 100 percent accurate and, therefore, virtually guarantees the desired sex.

There is increasing demand for such sex selection procedures, even here in the U.S. Most infertility specialists, based on ethics recommendations of professional societies, currently do not, however, offer PGD for so-called “elective” sex selection. Elective sex-selection has to be contrasted from “genetically-indicated” sex selection procedures, where embryos of a particular sex are selected, since the other sex carries a risk for a specific genetic disease. PGD, in an effort to prevent the birth of genetically affected offspring, is an increasingly accepted methodology and is, therefore, offered routinely by a number of infertility centers, ours included.

Some fertility specialists have started offering PGD also in an attempt to “*balance*” families. This means, if in a family a preponderance of boys has been born,

and the parents now wish for a girl, they will proceed with PGD for the purpose of balancing the sex distribution within that one family. Even though this is ethically still a rather controversial proposition, recent opinions by professional organizations on the ethics of such an approach have been more permissible.

Sarah and Yehuda Bloomberg, principally, came to see me at our New York office for family balancing purposes. They, however, also had developed a secondary infertility problem which originally clearly had not been present since they were the proud parents of five healthy girls, ages four to fourteen. What they had desired most, ever since they married - a boy - who would continue the family name, they were still lacking.

Sarah and Yehuda were orthodox Jews, as their appearance immediately revealed. Sarah was conservatively dressed in a silver gray business suit. For the knowing observer, it was apparent that, in the custom of the orthodox Jewish woman, she wore a wig over her own short hair or shaven head. Her sheitel, as it is called in Yiddish, was, however, not of the often seen only too obvious, poor quality. Hers was an expensive wig, corresponding to the obviously luxurious quality of her clothes and accessories.

Sarah clearly was a woman of taste, - conservative taste, maybe, - but concerned about her appearance, nevertheless.

Yehuda was dressed in the traditional black, long robe-like coat that orthodox Jews almost uniformly wear. His was, however, also one of obvious quality and expense,

with the silk-like fabric reflecting some of the sun's rays that were penetrating the windows of my corner office, giving it a rich and luxurious texture.

He was almost six feet tall, with a rather massive build. A black beard, with beginnings of gray at selected spots, framed a face, exceeding kindness. Peyses, the long side locks, pushed behind his ears, and a large black chapeau on his hat, he could have set in as a model for the quintessential rabbi.

Sarah, in contrast, was rather petite in figure, though clearly not in personality. While Yehuda was soft-spoken, almost gentle, Sarah was clearly announcing her presence and was at times even somewhat pushy.

Sarah was born in Israel to a family of prominent Chasidic rabbis whose family tree went back to a small town in Western Russia. At age 16, she was told by her family that a husband had been selected for her. She later learned that he lived in Brooklyn, New York, which meant that she would have to establish her home there as well. At age 17, she was married to Yehuda in a large ceremony, which, in recognition of the prominence of the two families, was attended by over 2,000 people, including "the rabbi" of their Chasidic sect.

Yehuda was born and bred in Brooklyn. He, too, came from a large and prominent family of Chasidic Jews with many well-known rabbis. His father, though he had completed his rabbinical studies, later obtained a MBA degree from Harvard Business School and had risen to becoming the senior partner of a well-known

investment banking boutique on Wall Street. Yehuda had followed in his footsteps and was the manager of two of the company's principal investment funds.

Their professional lives had, however, not affected their orthodoxy. Both generations had remained fully dedicated to a strictly orthodox interpretation of Jewish law and continued to follow the traditions of their orthodox sect. This meant, amongst other things, prearranged marriages and it was, therefore, not surprising that Sarah and Yehuda had met only once before they were married.

They, nevertheless, or maybe, exactly for that reason, developed a very loving relationship and successful marriage. Sarah conceived for the first time shortly after their wedding and gave birth to a daughter after an uneventful pregnancy.

At that point, she decided to attend college, - a somewhat uncustomary decision in her circles, where women generally are expected to stay home. "I wanted Sarah to have a fulfilled life," Yehuda explained to me one day, and went on to say: "I had a college education. Why shouldn't she?"

Sarah and Yehuda were thus an interesting combination of tradition and modernity, traditional religious life and, yet, open to the modern world. Most importantly, they continued to grow in parallel. As Yehuda advanced through the ranks at his father's investment banking firm, Sarah progressed academically. Over the ensuing eight years, she earned a masters in educational theory and later a doctorate from Yeshiva

University. By the time I met Sarah and Yehuda, she was a professor of considerable reputation at her alma mater and the mother of five, yes five, daughters.

She was 37 years old and had lived a rather busy life. “Fortunately, I could afford help,” she explained to me. “Without help at home, I could not have done it.”

What she meant was that she continued her studies while, in parallel, giving birth to another child, more or less, every two to three years. Their economic situation allowed her to keep a house manager as well as a full-time nanny at all times. She, therefore, had all the help she needed to keep an impeccable house and, at the same time, pursue her studies in a most serious way.

“I am grateful to God that he gave me the circumstances to do all of this,” she told me one day. “I know that many women in our community would like to do the same thing, but simply cannot afford to do it. This is why I convinced my father-in-law and my husband to create our foundation to help them.”

Their foundation was called *Foundation Be Esrato*, translated from Hebrew “The Foundation by His Help,” and was initially meant to exclusively serve educational needs of orthodox women. Very quickly, however, the Board of this not-for-profit foundation recognized that, as Sarah explained: “Education could not be addressed in a vacuum. Women who had educational needs also had other social needs, which required attention in parallel.” The Foundation’s Board, therefore, gathered a remarkable advisory group of experts from within, but also from outside, their orthodox Jewish community. Amongst

those was a young rabbi who had risen to prominence within the community as an expert on fertility.

Rabbi Samuel Ashkenazi had, by himself, become a highly specialized social service agency. Shortly after being ordained as a rabbi, he encountered a young couple who needed advice since they had been unable to conceive in over a year. Immediate conception was expected in this community and a couple which had not been successful in over a year after their wedding was of obvious concern. They needed help; both of their families were pressuring. Questions were being asked and they, in turn, had come to the rabbi for some of the answers.

Unfortunately, Rabbi Ashkenazi did not have the answers, either. More importantly, he recognized that nobody in the community at that point was in a position to provide those. And this is how the self-education in infertility of Rabbi Ashkenazi started.

Initially he read books addressed to the lay public, but he quickly graduated to medical text books. Then, he started attending medical conferences, dedicated to the theme of infertility and began to meet the people whose papers and book chapters he had previously read. This allowed him to learn about the personal qualities of some of the leading authorities in the field as well.

By the time I met Rabbi Ashkenazi for the first time, he understood modern infertility treatment as well as anybody and had become the principal adviser to the

orthodox Jewish community on the topic. It also made him a principal referral source to infertility care providers since he was also a master in matching his patients' medical and personal needs with specific levels of expertise, and personalities, of various fertility experts.

His expertise had brought him to the attention of the Bloombergs and led to the invitation to join their professional advisory board of the foundation.

It was during one of the meetings of the advisory group that Sarah asked Rabbi Ashkenazi for the first time about sex selection. As I was later told by both participants in this conversation, independently, Rabbi Ashkenazi at that point almost categorically refused to discuss the medical options of sex selections. He apparently did it in a way, which made Sarah hesitant to reapproach the subject. She, at that point, had just given birth to her fourth daughter and, based on the rabbi's response, decided, "to leave things in God's hands," and "to not further pursue the topic."

Approximately two years later, Sarah gave birth to her fifth daughter. This pregnancy, like the preceding four, had been very uneventful. The delivery, however, for the first time, was somewhat complicated. Sarah's placenta did not detach well from the uterus, following the vaginal delivery of her daughter and required manual removal. Her uterus then did not contract, as it usually does, after expulsion of the placenta. She experienced a postpartum hemorrhage, which required a scraping of her uterus, a so-called D&C, and the administration of three units of blood.

Following the delivery, Sarah expected her menstrual period to return, as it had done on prior occasions, once she discontinued breast-feeding. But this time, it did not happen. In medical lingo, Sarah became amenorrheic. After six months of no menses, she went to see her gynecologist. When he examined her, he felt a bulky, enlarged uterus. After performing a few blood tests, he recommended that she have her uterus surgically removed, a hysterectomy performed.

Sarah was surprised and distraught by this recommendation. She trusted her gynecologist because she had been seeing him since her marriage. He had delivered all five of her children and had always taken care of her well. He was a highly regarded physician on Park Avenue and had a professorial appointment at one of Manhattan's most prestigious medical schools.

And, yet, something told her, "that this decision wasn't kosher," as she explained to me. "Something told me that it was not yet time to have a hysterectomy. I knew God wanted me to have more children. I sincerely knew it," she exclaimed.

In orthodox Jewry it is tradition to have many children. It is God's order to multiply and, therefore, large families are the rule.

To have five children, as Sarah did at that point, was, therefore, nothing unusual. In fact, considering Sarah's relatively young age, it would almost be expected of her to have more children.

Sarah and Yehuda had been planning on having another child. They also, this time, really wanted a son!

While Jewish tradition does not discriminate between female and male offspring, a male offspring has, nevertheless, considerable importance, especially in orthodox families. He not only carries on the family name, but he is also the learned one, the one who will spend his life studying Jewish laws and their interpretations. Whatever his profession, whatever his occupation, studying the Torah and the many books of the Talmud will be a constant and inevitable part of his life, at any age. He is, thus, not only the carrier of the family's torch, in a traditional secular sense, but, maybe even more importantly, the carrier of the family's learned wisdom over endless generations. An orthodox Jewish family without a male offspring is, therefore, often considered, an incomplete family, and, most likely, will attempt further pregnancies in an attempt to have a male offspring after all.

Sarah and Yehuda had many discussions on the subject. They had wished for a boy for a long time. "It is not that we don't love our girls," Sarah explained to me, when we first met in consultation; "We love them with all of our hearts. We adore them, and we spoil them, and we are bringing them up to, hopefully, become modern, educated

orthodox Jewish women. But, we need a son to continue the tradition, to carry on the family, to pass on the business and to teach him what we know.”

Those were some of the words that were thrown at me during our first encounter in my New York office. Sarah and Yehuda had come to see me at the recommendation of Rabbi Ashkenazi. Before agreeing to a hysterectomy, Sarah had decided to consult with the Rabbi, this time in a more formal way. She made an appointment to see him at his office and brought copies of all her medical records.

A visit to Rabbi Ashkenazi was not unlike seeing a physician. He had regular office hours, a waiting room and a small consultation room, where he met with his “patients.” Like a physician, he often reviewed old medical records before dispensing an opinion.

After reviewing Sarah’s medical records, he told her that it appeared that she had an abnormally large uterus. Considering her age, her recent history of amenorrhea, the complication with her last pregnancy which was due to a densely, adhering placenta, a finding that could repeat itself in future pregnancies, even in more severe form - and considering that fact that she already had five healthy children, her gynecologist felt that taking out her uterus was the best and safest treatment option. Rabbi Ashkenazi knew Sarah’s gynecologist well and spoke highly of him. He, therefore, *in principle*, agreed with his medical opinion, except that, as he later stated to me: “Medical knowledge is not everything. You and I know that medicine is as much art as it is science. Except what

you call art, I call part of God's will, and, for me and my patients, God's will comes before anything else.”

God's will, in Rabbi Ashkenazi's opinion could not be “that the Bloomberg family would have no male offspring to carry on the long and distinguished tradition their name represented.” Rabbi Ashkenazi was convinced that Sarah, under proper medical care, might have a chance to conceive again, despite the current lack of menstrual periods, and, “with God's help, maybe, next time, even have a boy.”

And this is why he referred her to my office and, this time, even discussed various biblical and talmudic recommendations about sex selection with her. Moreover, he recommended that she address with me the more scientific approaches towards sex selection, though I am convinced he could have done this himself just as well.

Sarah and Yehuda thus came to see me for two separate, yet, related purposes: First, they wanted my opinion on whether Sarah could safely conceive. This, in itself, once again, raised two separate questions: Could Sarah still get pregnant, despite her amenorrhea, her lack of menstrual periods? And could she deliver another pregnancy without risking her life?

And then, there was this second issue: what could be done to help her have a boy, the next time around?

Yehuda was very outspoken in our first meeting, when he made it abundantly clear that, independently from how strong his and Sarah's desires were to have more

children, and, hopefully, a son: “I don’t want to do anything that could endanger Sarah’s life,” he said. “We have five wonderful children and they need their mother and I have a wonderful wife and a wonderful life with her. I don’t want to do anything that would risk losing her.”

Sarah’s gynecologist had apparently explained to them that the reason for her postpartum hemorrhage had been a partial *placenta accreta*. A placenta accreta is an after-birth that has grown *into* the muscle of the uterus. It, therefore, does not separate in normal fashion from the uterus after delivery and can lead to heavy, sometimes uncontrollable bleeding, when removed manually. A placenta accreta, therefore, clearly can represent a life-threatening situation.

They also presented a recurrence risk. This meant that Sarah was clearly at increased risk to have another placenta accreta, maybe even of more severe degree than the first time, with her next pregnancy.

Rabbi Ashkenazi had also pointed out the risk but had told them that he could not quantify it and had suggested to get this assessment from me.

I am always somewhat skeptical about prophylactic surgery. While there are rare circumstances that may warrant such procedures, a large majority, in my opinion, don’t. I felt that this potentially was a case that might not warrant surgery. After all, a placenta accreta could be sonographically diagnosed, precautions could be taken at time of

delivery, including the possibility of cesarean section with concomitant hysterectomy, a cesarean hysterectomy, if really needed. The risk of placenta accreta was so big because most come as a surprise. If we had an opportunity for preparation, the risk would be much smaller.

More importantly, however, I did not understand why Sarah wasn't getting her period since her last delivery. And, while there were a number of possible explanations, I found it difficult to make a recommendation about anything without having an answer to this problem.

As a first step I, therefore, decided to take Sarah into the ultrasound room to perform a gynecological scan. In this kind of a procedure a vaginally placed ultrasound probe allows us to access a woman's pelvic anatomy with considerable accuracy. For example, we can delineate the uterus and the ovaries and can define any pathology in these organs.

I was, in fact, surprised that Sarah's gynecologist would recommend a hysterectomy without a prior ultrasound scan of her uterus. Uteri, after all, can be enlarged for a variety of reasons.

In scanning Sarah's pelvic organs, I, indeed, immediately saw a greatly enlarged uterus. Gynecologists record uterine sizes by gestational age size. This means, we clarify the size based on how large a uterus becomes at different gestational ages. By

such a measure, Sarah's uterus was almost sixteen weeks - this means four months pregnancy size.

More surprisingly, however, her uterus appeared blown up, like a balloon, with blood-like fluid filling a greatly enlarged uterine cavity.

"Do you get menstrual cramps at the time of your period, even if you don't get your period?" I asked Sarah the moment I saw this sonographic picture. "I don't know when my period is supposed to come," Sarah answered, and she went on: "But I told Yehuda just last week that I have cramps, like with a period, except that it does not come."

The diagnosis was obvious!

I removed the vaginal ultrasound probe and replaced it with the gynecologist's classic torture instrument, the speculum. After visualizing Sarah's cervix, I asked my assistant to give me some lidocaine, so I could apply a paracervical block for local anesthesia. After waiting for a few minutes to let the local anesthetic take effect, I turned towards Yehuda who was in the room with us and said: "Get ready for a little surprise."

And with these words, I inserted a small dilator into Sarah's cervix. After overcoming some initial resistance, I felt that I was breaking through scar tissue and, as I removed the dilator, a splash of foul smelling brownish fluid escaped under considerable

pressure, soiling my scrubs, as I could not escape quickly enough from the jet-like stream.

The amount of fluid escaping was considerable. Moreover, it had a distinctively unpleasant smell and contained obvious cellular and tissue debris.

Yehuda's face turned white and, for a moment, I was concerned he would lose consciousness. He, however, quickly regained his composure and asked me: "What was this Dr. Gleicher? Does she have cancer?"

Sarah was completely unaware of what had transpired because she, of course, was unable to see it. She, too, however had seen the color of Yehuda's face change and now she heard him mutter his question.

"Cancer," she yelled out. "Do I have cancer?" I quickly moved to calm both because Sarah's diagnosis, of course, had absolutely nothing to do with cancer. She had developed an obstruction of her cervix, following her D&C. The cervix is the outflow tract for the uterus. If the cervix is obstructed by a *cervical stenosis*, the monthly menstrual flow cannot pass through the cervix into the vagina. Consequently, it accumulates inside the uterus, enlarging the uterine cavity by blowing it up like a balloon.

This was the picture I had seen on ultrasound. The diagnosis was so obvious! This is why her uterus was enlarged to 14 weeks gestational size and why she still had

menstrual discomfort. She never had ceased menstruating. She just did it retrograde, through the tubes into her abdomen - and that was painful.

By dilating her cervix, I reopened the passage and got splashed because of the high pressure under which menstrual flow had accumulated within the uterus.

I quickly explained all of this to Sarah and Yehuda and their concerns immediately evaporated. “Am I now getting my periods again?” Sarah asked. I answered: “Of course, though we will have to make sure your cervix does not close up again.”

“Does this mean I can get pregnant again?” Sarah continued.” “Of course,” I answered, “Why not? Your hormonal axis always functioned normally. It is not that you didn’t get your periods. You did! You just didn’t know because it didn’t flow out,” I explained once again.

A week later, Sarah and Yehuda were back in my office for a follow-up exam. A repeat ultrasound demonstrated a completely normal uterus. There was no fluid visible in the cavity and the overall uterine size had shrunk to six weeks gestational age.

“When do you want to try to get pregnant?” I asked Sarah. “As soon as possible,” she responded, while Yehuda smiled affectionately.

“Do you want to talk about sex selection?” I asked. “No,” came the answer in unison from Sarah and Yehuda. “Why not? What made you change your mind?” I retorted in a quite surprised tone.

“Elohim – God – did,” Yehuda answered apparently for both of them. “Just think about it,” he continued. “Look what a miracle He made: Sarah could be without a uterus by now. He made us come and see you and, not only is Sarah well now and menstruating again, but it seems we can have children again. And, if He can make one miracle, why shouldn’t He make another one and give us a son? But, on the other hand, if He wants us to have another girl, that is OK, too. We will then simply continue to try until He finds it is the right time to give us a boy.”

And so it was, except that Sarah and Yehuda did not have to try much longer. Two months later Sarah was pregnant again. She, for religious reasons, did not undergo prenatal genetic diagnosis. At 16 weeks it was, however, apparent by ultrasound that, this time, she carried a boy. God had, in fact, given them two miracles in a row.

Sarah, indeed, developed once again a placenta accreta. She, therefore, had a cesarean section delivery, followed by cesarean hysterectomy. Shlomo Reuben is the name of their son who was delivered uneventfully and, ever since, is not only being spoiled by his parents but also by his five older sisters. Yehuda is calling him their “Kosher Child” because, as he said to me, “Sarah knew that the medical recommendation she had received was not kosher. Trusting in God always works.”

Sarah and Yehuda have since become close friends of mine. We have talked about the science of sex selection many times. I will, however, never forget what Yehuda told me on that day when he and Sarah informed me of their decision *not* to pursue sex selection. He had said: “In the end only God can select the sex and make the right choice. Sarah and I know that He will.”

And He did!