

# PREIMPLANTATION GENETIC TESTING (PGT) AND BRCA

## To what extent should we intervene?

- Is fertility best left a mystery? Is it our place to intervene?

**Bereishit Rabba Toldot 65:12** Seven things are concealed from humans, and they are these: (1) the day of death...and (7) a person does not know what is in the pregnancy of a woman...

ברכות דף י עמוד א שנאמר "בימים ההם חלה חזקיהו למות ויבא אליו ישעיהו בן אמוץ הנביא ויאמר...משום דלא עסקת בפריה ורביה. אמר ליה: משום דחזאי לי ברוח הקדש דנפקי מינאי בנין דלא מעלו. אמר ליה: בהדי כבשי דרחמנא למה לך? מאי דמפקדת, איבעי לך למעבד. ומה דניחא קמיה, קודשא בריך הוא לעביד.

**Berachot 10a** For it is said "In these days Chizkiyahu became mortally ill and Yeshayahu son of Amotz the prophet came to him and said...'Because you did not occupy yourself with the mitzva of procreation.' He said to him: 'Because I saw with the Holy Spirit that children who are not good will issue from me.' He said to him: 'Why concern yourself with God's concealed matters? What you are commanded, you must do, and what rests before Him, God will do.'

- On the other hand, don't we have a mitzva to heal others?

ברכות דף ס עמוד א דתני דבי רבי ישמעאל "ורפא ירפא" מכאן שניתנה רשות לרופא לרפאות

**Berachot 60a** For it is taught in the beit midrash of Rabbi Yishmael: "He shall surely heal" From here is given permission to a doctor to practice healing.

**Rashi Bava Kama 85a** We don't say: 'God has struck, and should we heal?'

**Ramban, Torat Ha-Adam** ...For it is a mitzva to practice healing.

## What are halachic perspectives on PGT for serious, immediate onset illness?

- Who suffers if we don't pursue PGT? How should we relate to new technologies?

**Rav Ya'akov Ariel (translated from Responsa Puah, p. 462-462)** But if most chances are that the child will be ill, they must not give birth in the natural way, but rather through assisted reproduction...There is no mitzva to bring children with defects into the world, both from the perspective of the children's suffering, and from the perspective of the parents' suffering..." And you should surely heal-from here is given permission to a physician to practice healing"— How much more so to prevent his illness. And if God gave medicine the ideas to prevent suffering in the world, one should take advantage of them and not rely on a miracle.

- Is it obligatory to pursue PGT in cases of serious, immediate onset illness? Is conceiving naturally permissible in these cases?

**Rav Asher Weiss (translated from Responsa Puah, p. 479)** Regarding the question whether he is obligated to attempt to bring children through IVF (with PGD)...The obligation in the mitzva is only the natural act that a person has in hand to perform...And in my humble opinion it is clear

that even if there is no obligation in this...even in this way a person can fulfill the mitzva of procreation, for in any case he has brought enduring seed into the world.

**Rav Shlomo Daichovsky (translated from Responsa Puah, p. 478)** Carriers of a genetic illness who seek to marry each other, despite their knowledge of the danger in the matter, can do this, and long as conceiving children will be done through IVF in a lab, and it will be possible to select the healthy embryos...If they wish to marry and to have relations the regular way, and they are not prepared for IVF, one should prevent this from them.

## Should we pursue PGT-M for later onset diseases like cancer?

- **PRO:**
  - PGT-M can cut off a disease pathway for generations and spare the risks of being carriers.
- **CON:**
  - One can live for decades with BRCA and without cancer or survive cancer.
  - For couples who can conceive naturally, PGT-M affects family planning, entailing a commitment to contraceptives and to IVF.
  - PGT-M adds a layer of complexity to the IVF process.
- **There is as yet no medical consensus. Halachic authorities have begun to debate:**

**Rav Dov Lior (translated from Responsa Puah, p. 481-482)**...Diseases that do not pose a mortal danger, that children will become sick from in the future, if the parents are prepared to handle this and to manage a routine life, they are not obligated to take steps to prevent the disease...However, if there is a mortal danger to the fetus, it seems, that there is an obligation upon the parents to prevent this through treatment...Regarding...from what percentage of probability that the disease will be passed from parent to fetus is there an obligation to prevent the pregnancy: It seems in my humble opinion, that since the laws of the Torah are given so that we act in accordance with the majority, if the doctors say that the disease has more than a fifty percent chance of not passing to the fetus, the parents are not obligated to be concerned... A disease that is supposed to be revealed in the offspring only after decades, it sees, that one should not be concerned at all, but rather should trust in God, Healer of all flesh, and it is very possible that by then a medical solution to the disease will be found.

- For Rav Lior: When disease is late onset, we should have emuna that medicine will develop in the interim and not intervene.

**Rav Avigdor Nebenzahl (translated from Responsa Puah, p. 483)** There is no obligation to bring a child with a defect into the world, if we bring a child into the world, there is an obligation to repair his defect in any way possible...In all of these cases [where there is great suffering, even when there is no mortal danger] there is an obligation to perform genetic testing...[Regarding significance of] probability of the disease: Even less than this [total certainty]. [Regarding significance of] time of incidence of the disease: One should practice in accordance with the medicine of today.

- For Rav Nebenzahl: A couple should evaluate whether to pursue PGT-M in light of current medical info, and the choice is up to them.