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Oncologists' Role in Patient Fertility Care:

A Call to Action

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Abstract

Oncofertility is a term coined just a few years ago to address the urgent, unmet needs of young cancer patients who were offered life-preserving but fertility-threatening treatments. The issue for many oncologists was not that they did not want to provide options to their patients; rather, the option list and the physician groups on the fertility side were limited. This issue has largely been addressed and the remaining barriers are few. Here are answers to the questions most frequently asked of oncologists by patients.

1. Do patients care about fertility in the face of a cancer diagnosis?

Yes, many studies conducted over the past 5 years have shown that young women and men are concerned about their endocrine health and the fertility consequences of cancer treatment. Patients who are not told about later fertility concerns at the time of diagnosis have stress levels in the range of posttraumatic stress disorder during survivorship.[1,2] Thus, oncologists are urged to provide a fertility consultation to mitigate the long-term health consequence associated with treatment.

2. What amount of time is necessary for women to leave oncology care, be assessed by a reproductive endocrinologist, decide what method to use for fertility preservation, go through the fertility care cycle, and return to oncology care?

Five years ago, ovarian stimulation cycles could take up to 6 weeks to time the start of the cycle. This is no longer standard of care. "Random start" fertility cycles induce ovarian follicle development at anytime during the cycle and take about 2 weeks from the start of ovarian stimulation medications to oocyte retrieval.[3] This minimizes the time between

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diagnosis and cancer treatment. Moreover, egg cryopreservation is now standard of care, eliminating difficult decisions regarding use of a partner's or donor's sperm and long-term storage of embryos.[4]

3. Do hormones cause cancer?

For most cancers in males, females, and pediatric patients, hormones are not involved in the onset or progression of disease. Young breast cancer patients may require hormone management, and because of this, some breast oncologists are reluctant to provide fertility care.[5] There are no data to support acceleration of disease if breast cancer patients do opt for one round of hormone treatment to collect eggs for cryopreservation, and many oncofertility clinics stimulate the ovarian cycle in the presence of letrozole, an estrogen-receptor antagonist. In a recent study[5] of tamoxifen adherence, fertility concerns were the number 2 reason given for not following the 5- and 10-year guidelines. Thus, the important message for oncologists is that attending to patients' fertility concerns, even for breast cancer patients, may improve long term outcomes because adherence to medications like tamoxifen could be greater.

4. Is fertility care affordable?

There is a great deal of work toward affordability of fertility care options by oncofertility clinics. Some insurance companies will cover fertility options as long as they are coded appropriately, using the cancer diagnosis. Certain advocacy organizations provide discounted services at specific clinics, free stimulation medications, and/or grants for patients undergoing fertility preservation. In today's social media-fueled world, many patients find ways to cover the fertility costs through crowd funding and from friends and family. The bottom line is that all young males and females should be advised of the fertility threat of their cancer care to enable the financial decisions to be made by the patient, not by the clinician before any irreversible damage to the gonads is done.[6]

5. What fertility preservation options are available?

The number of options for males and females, from birth upwards, continues to increase as experimental options of ovarian and testicular tissue freezing come to fruition in centers around the globe. A detailed list of options is available on Northwestern's oncofertility website (http://oncofertility.northwestern.edu) as well as access to a national patient navigator who can help patients and oncologists navigate existing and emerging options (http://preservefertility.northwestern.edu). There is no one-size-fits-all approach to fertility preservation, so a timely referral is key. Moreover, nonbiological options (like adoption services) are available and not just those that require immediate intervention. In some cases, the oncology treatment strategy is unlikely to cause permanent infertility, which can offer reassurance to patients. Even if a patient is not interested in talking to an oncofertility specialist because they already have children, the conversation is not limited to fertility but can also include contraception during cancer treatment.

6. Besides fertility, what other reproductive health concerns should I be aware of?

Not all female patients will lose their fertility; some will go through a short period of infertility, return to cyclicity and then enter early menopause. Issues of menopausal symptom management will be important for discussion or referral. Vaginal dryness, irregular or absent periods with episodic menstrual pain management, and weight fluctuations are a few of the issues associated with the profound menopausal symptoms young women face when they go into an immediate menopause. Vaginal creams that include estrogens or other hormones can mitigate many of these symptoms, with little risk for adverse effect on the cancer, and enable more attention to restoring long-term health and quality of life. The subjects of sex and sexuality can often be overlooked in a busy oncology practice. Asking a patient how his or her sex life has been can open up a dialogue and allow patients to know that it is okay to discuss multiple aspects of cancer care.[7] Discussions about contraception are also important for patients undergoing oncology treatment and, though it seems counterintuitive, patients have gotten pregnant or fathered a pregnancy during active treatment.

It is time for oncologists to engage in fertility care for their patients. In our view, a fertility consultation can be thought of as another ordinary referrals, similar to a referral to plastic surgery or genetics prior to the start of treatment. Moreover, oncologists can provide meaningful information on hormone health that can be critical not just to physical health but also to psychosocial well-being.

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