OBSTETRICS & GYNECOLOGY
Clinical Expert Series

Preservation of Female Fertility: An Essential Progress

Togas Tulandi, MD, MHCM, Jack Y. J. Huang, MD, and Seang Lin Tan, MD, MBA
Obstet Gynecol 2008;112:1160–72

ACCME Accreditation
The American College of Obstetricians and Gynecologists (ACOG) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. *(Continuing medical education credit for "Preservation of Female Fertility: An Essential Progress" will be available through November 2011.)*

AMA PRA Category 1 Credit™ and ACOG Cognate Credit
The American College of Obstetricians and Gynecologists (ACOG) designates this educational activity for a maximum of 2 AMA PRA Category 1 Credits™ or up to a maximum of 2 Category 1 ACOG cognate credits. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Disclosure Statement
Current guidelines state that continuing medical education (CME) providers must ensure that CME activities are free from the control of any commercial interest. All authors, reviewers, and contributors have disclosed to ACOG all relevant financial relationships with any commercial interests. The authors have made the following disclosures: Dr. Tulandi has been an advisor to Genzyme (Cambridge, MA), Baxter (Deerfield, IL), and Johnson & Johnson (New Brunswick, NJ). Dr. Huang does not have any potential conflicts of interest to disclose. Dr. Tan has received royalties from Medicult (Copenhagen, Denmark) for the sale of the Cryoleaf vitrification device. Any conflicts have been resolved through group and outside review of all content.

Before submitting this form, please print a completed copy as confirmation of your program participation.

ACOG Fellows: To obtain credits, complete and return this form by clicking on "Submit" at the bottom of the page. Credit will be automatically recorded upon receipt and online transcripts will be updated twice monthly. ACOG Fellows may check their transcripts online at http://www.acog.org.

Non–ACOG Fellows: To obtain credits, submit the printout of the completed quiz to your accrediting institution. The printout of the completed quiz is documentation for your continuing medical education credits.

1. Total body radiation administered before puberty can result in ovarian failure when exposures are as low as:

   ☐

   A. 5 Gy
   B. 10 Gy
   C. 15 Gy
   D. 20 Gy
   E. 25 Gy

2. Chemotherapy for reproductive-age women with breast cancer results in ovarian failure for approximately what percent of women?

A. 10%
B. 25%
C. 33%
D. 50%
E. 75%

3. Which of the following chemotherapeutic agents is associated with the greatest gonadal toxicity?

A. Cyclophosphamide
B. Methotrexate
C. 5-fluorouracil
D. Doxorubicin
E. Bleomycin

4. A natural acceleration of oocyte atresia occurs at about what age?

A. 28
B. 33
C. 38
D. 43
E. 48

5. Turner syndrome is associated with very low fertility because of:

A. Abnormalities of implantation
B. Abnormalities of placentation
C. Increased incidence of uterine malformations
D. Delayed puberty
E. Accelerated oocyte atresia

6. According to the American Society of Clinical Oncology, the use of gonadotropin-releasing hormone analog (GnRHa) agents to preserve gonadal function after chemotherapy can best be characterized as:

   A. Highly effective
   B. Possibly effective
   C. Insufficiently studied to evaluate
   D. Possibly ineffective
   E. Ineffective

7. The most established method for fertility preservation according to the American Society of Clinical Oncology and the Ethics Committee of the American Society for Reproductive Medicine is:

   A. In vitro fertilization followed by embryo cryopreservation
   B. Follicle stimulation followed by oocyte cryopreservation
   C. In vitro oocyte maturation followed by fertilization
   D. Mature oocyte cryopreservation
   E. Embryo vitrification

8. Embryo vitrification offers the promise of improved embryo survival over conventional slow freezing because of reduced:

   A. Cytoplasmic water loss
   B. Nuclear membrane disruption
   C. Cryopreservative toxicity
   D. Ice crystal formation
   E. Anoxia during the freezing process

9. A patient with breast cancer is considering ovarian tissue cryopreservation with eventual reimplantations of the ovarian tissue after she finishes her chemotherapy. She should be counseled that following transplantation the graft is likely to remain functional for what period of time?

   A. 3–4 months
   B. 12 months
   C. 36 months
   D. To age 50 years
   E. Indefinitely

10. At the close of an ovarian transposition in anticipation of pelvic radiation therapy, a metal clip is routinely applied to the ovary. The purpose of this is to:

    A. Scatter radiation away from the ovary
    B. Allow the ovary to be located on imaging
    C. Provide positive hemostasis
    D. Provide permanent attachment of the ovary in its new location
    E. Allow the ovary to be replaced in its original location using magnetic resonance imaging (MRI)

ACOG ID Number:

Name:

Address:

City/State/Zip:

Actual time spent completing this activity (you may record up to 2 hours):

Print Form | Submit CME | Reset Form