Ovarian Toxicity Monitoring

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women. For transgender men assigned female at birth, determine if ovarian tissue remains intact.

PRESENTATION

Female of reproductive age[1] (18-43* years) undergoing treatments that impact ovarian function **or** with novel agents for which ovarian toxicity data are not yet available

→ Offer fertility counseling if patient has not completed childbearing (or is ambivalent)
- Referral to Oncofertility (Reproductive Endocrinologist) to discuss fertility preservation options such as cryopreservation of oocytes and/or embryos, cryopreservation of ovarian tissue and ovarian suppression before starting treatment

→ Determine the patient's phase of cancer care

OVARIAN FUNCTION AND TOXICITY MONITORING

Pre-treatment →
- Menstrual history
- Baseline evaluation of ovarian reserve[2] (AMH and antral follicle count via transvaginal ultrasound)
- Consideration of fertility preservation options before starting treatment
- Provide psychological support and counseling for patients dealing with fertility issues

During treatment →
- Monitor for signs of ovarian toxicity or failure related to treatment[3]
  - Menstrual history
  - Ovarian function (AMH)
- Use of protective strategies: Consider gonadotrophin-releasing hormone analog (GnRHa) during chemotherapy for preserving ovarian function
- Provide psychological support and counseling for patients dealing with fertility issues

Post treatment →
- Follow-up evaluations to monitor ovarian function:
  - Antral follicle count via transvaginal ultrasound annually for 2 years post treatment
  - Menstrual history and AMH at 6 and 12 months post treatment, then annually for 5-10 years
- Referral to Oncofertility (Reproductive Endocrinologist) for patients interested in discussing timing and strategies for conception
- Provide psychological support and counseling for patients dealing with fertility issues

AMH = anti-müllerian hormone

* Upper age limit of 43 years selected as live birth rate (with own oocytes harvested after age 43) is less than 5%

[1] Premenopausal women with at least a portion of one ovary

[2] Concomitant medications such as GnRHa, hormonal contraceptives and endocrine therapy, and surgical procedures (hysterectomy, endometrial ablation, tubal ligation or salpingectomy, and bilateral oophorectomy) can affect the interpretation of ovarian reserve markers

[3] For agents with sparse data on the mechanism and extent of ovarian toxicity, assessment of clinical and biochemical markers is recommended every 6-12 months while on treatment

Department of Clinical Effectiveness V1
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SUGGESTED READINGS

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DEVELOPMENT CREDITS

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