A Thoughtful Pause for Sparing Oophorectomy

We read with interest the recent article by Abboud et al[1] regarding ovarian malignancy in women after radical cystectomy (RC). The authors demonstrate a low rate of subsequent ovarian malignancy, and conclude that oophorectomy at the time of RC may be omitted. While we applaud the goal to spare the undesirable morbidity of oophorectomy, we suggest a pause to blanket implementation of this recommendation.

Ovary-sparing surgery has received significant recent interest. As noted in the article, the American College of Obstetricians and Gynecologists recommends salpingectomy with ovary preservation,[2] based on that fact that most ovarian malignancies originate rather from the distal fallopian tube.

The data presented demonstrates a low rate of ovarian cancer in this cohort after RC, with only 2 women noted develop ovarian cancer after RC. However, removal of the ovaries at RC is routine based on AUA guidelines.[3] It is unclear from the database what proportion of women underwent ovary-sparing RC. If only a small proportion retained ovaries, then true incidence is difficult to calculate and the comparison made to the general population is imprecise. As such, the observed low risk of subsequent ovarian malignancy may be rather related to the risk reduction from removal of the ovaries.

Prior study shows that up to 22% of bladder cancer patients may have relevant germline abnormalities, including BRCA1/2.[4] This has important implications with respect to remnant ovarian tissue, as some mutations significantly increase ovarian malignancy risk. Might this represent a high-risk population modified to a low-risk population with oophorectomy? Indeed, the above ACOG guideline recommending ovary-preserving salpingectomy is specified for women at average risk undergoing surgery for benign disease.

Finally, the impetus for ovary-sparing RC includes patient symptoms as well as long-term adverse effects from oophorectomy. These risks can be mitigated with the use of hormone replacement therapy. Importantly, the removal of the uterus allows for omission of the progesterone component, a safer regimen with respect to breast cancer risk.[5] This practice remains safe even in patients with genetic mutations at higher risk.[6]

While salpingectomy should be performed in all cases, the decision for ovary-sparing should be based on an individualized approach. We acknowledge, with the authors, that there likely exist women at low risk of ovarian malignancy appropriate for ovary-sparing surgery. Consultation with the gynecologic oncology can provide further risk assessment. The specific factors for consideration include:

1. Desire for future fertility
2. Family history — Significant family history should prompt genetic counseling and oophorectomy consideration.
3. Hormonal management — Premenopausal women at normal risk should have strong consideration for ovary sparing. The benefit of sparing ovaries in perimenopausal or postmenopausal women is lessened, especially >5 years postmenopause.
4. Contraindications to hormonal replacement therapy.

After consideration of the above factors, the risks and benefits of sparing the ovaries can be discussed with the patient. Ovary-sparing surgery may be appropriately chosen in many patients. However, the bladder cancer population overall represents a high-risk group given the prevalence of germline alterations. It is our view that the routine sparing of the ovaries at the time of RC should not become routine practice until further study can adequately address the safety.

References

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