

Evidence Discussion (ONC 21)

Ovarian Cancer

Screening

According to ACR Appropriateness Criteria for ovarian cancer screening, any imaging in an average risk member is “usually not appropriate.”

There is much debate about the role of imaging in screening for ovarian cancer. This cancer has a low prevalence but is the leading cause of mortality in women in the United States. Average lifetime risk is 1.3%. There are factors that increase the risk such as family history, BRCA 1 or BRCA 2 mutations, nulliparity, lack of hormonal contraceptive use and lack of breastfeeding. Genetic predisposition is associated with the highest increase in risk

In members who are considered high risk (personal or family history, genetic predisposition or elevated CA-125) ultrasound and color Doppler may be appropriate annual screening along with CA- Lu et al showing a PPV 40% with specificity of 99.9% using ROCA.

Initial Staging /Suspected Diagnosis

Complex Adnexal Masses

Since staging of ovarian cancer is primarily surgical, routine imaging is not indicated pre-operatively. If there is a question about the pelvic mass evaluation by ultrasound, transvaginal or pelvic (76830 or 76856) and using O-RADS or IOTA to clarify risk before surgery.

Initial Workup

Once surgical staging is completed, CT C/A/P would be needed for stage II or higher. Only if surgical proof of primary peritoneal disease or inconclusive CT findings would PET/CT be needed.

Recurrence

For follow up if disease was completely resected and normal CA-125 or other markers normal, then no imaging is needed. If any question or signs or symptoms of recurrence

then CT is appropriate with chest included if there are symptoms there or rising tumor markers.

To monitor response to treatment CT is appropriate every two cycles. PET only if there is a question on CT,

Surveillance

Stages I to III there is no need for advanced imaging if there are no signs or symptoms.

If on maintenance or if there is measurable disease present, CT of the areas involved every three months for up to 5 years.

References:

1. NCCN Guidelines Version 1.2024 Ovarian Cancer.
2. ACR Appropriateness Criteria for Ovarian Cancer
3. Lu, KH, Skales, S, Hernandez, MA, et al. A 2 Stage ovarian cancer screening strategy using the Risk of Ovarian Cancer Algorithm (ROCA) identifies early-stage incident cancers and demonstrates high positive predictive values. Cancer, 2013;119(19) 3454-3461.
4. Andriotti, RT, Timmerman, D, Strachowski, LM, et al, O-RADS US Risk Stratification and Management System A Consensus Guideline from ACR Ovarian-Adnexal Reporting and Data System Committee. Radiology 2020; 294(1), 168-185.
5. IOTA group.org
6. AJOC Cancer Staging Manual, Eighth Ed. (2017). Springer International Publishing.