American Society for Radiation Oncology issues updated guideline on radiation therapy for endometrial cancer

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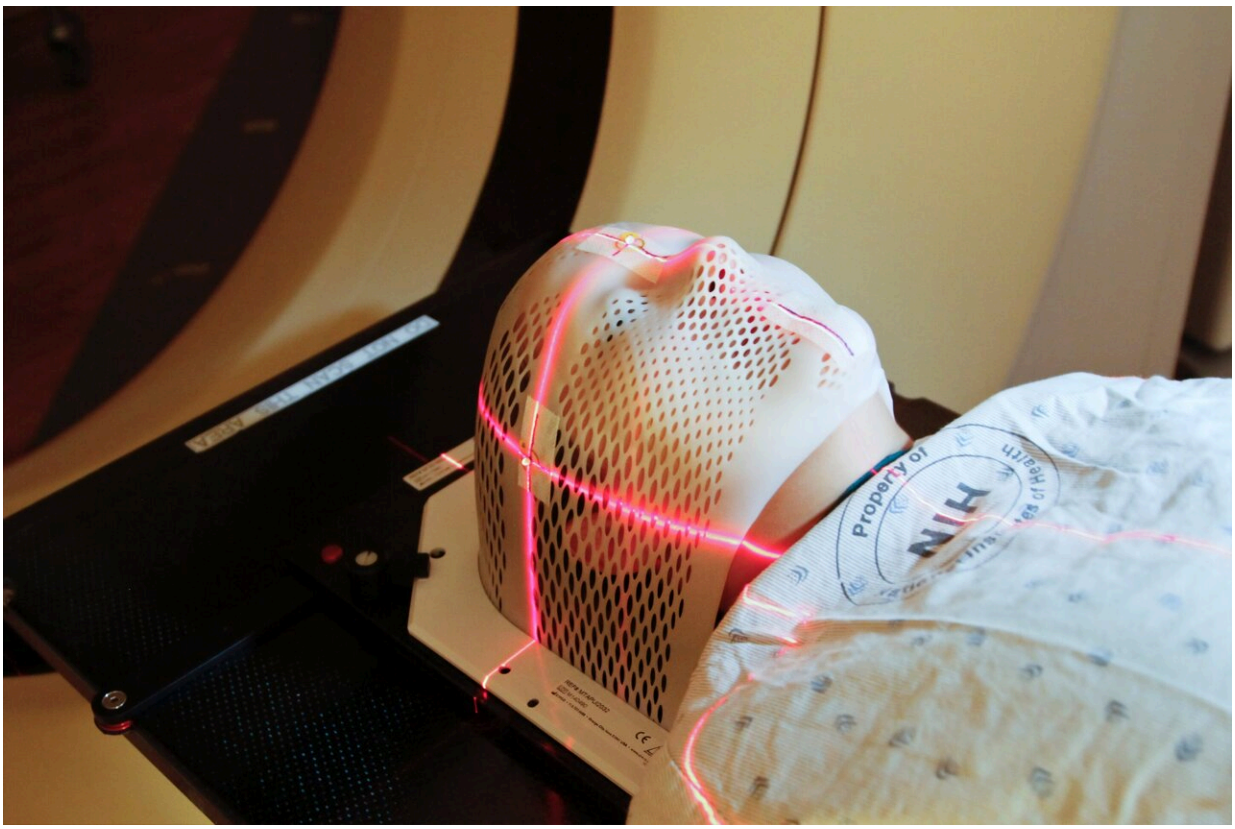

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A newly updated clinical guideline from the American Society for Radiation Oncology (ASTRO) provides recommendations on the use of

radiation therapy and systemic therapy after surgery to treat patients with endometrial cancer. The guideline also considers the role of surgical staging and molecular profiling techniques in determining whether a patient should receive post-operative therapy. The guideline is published in the January/February 2023 issue of *Practical Radiation Oncology*.

Endometrial cancer is the most common type of gynecological cancer in the U.S., with more than 60,000 estimated new diagnoses each year. Standard treatment involves surgical removal of the patient's uterus, cervix, fallopian tubes and ovaries, with additional post-operative therapy indicated for patients with risk factors for cancer recurrence.

"Since ASTRO published its original endometrial cancer guideline in 2014, multiple research teams have published high-quality clinical trials on the usefulness of post-operative therapy for patients with different disease stages and risk profiles," said Beth A. Erickson, MD, FASTRO, chair of the guideline task force and a professor of radiation oncology at the Medical College of Wisconsin in Milwaukee.

"For patients with an elevated risk of recurrence following endometrial cancer surgery, clinical trials consistently show that adjuvant therapy can improve outcomes," she said. "Our task force synthesized findings from these trials into recommendations for external beam radiation, brachytherapy and chemotherapy in the post-surgical setting, with a focus on multidisciplinary, patient-centered care."

The guideline task force also considered new trials on the accuracy of surgical staging techniques and the increasing role of molecular profiling for endometrial tumors in guiding adjuvant therapy decisions.

Matthew M. Harkenrider, MD, vice chair of the guideline task force and an associate professor of radiation oncology at Loyola University Chicago said, "Researchers have identified several potential biomarkers

for endometrial cancer and are now exploring whether these molecular markers can help determine which patients will benefit from adjuvant therapy."

The guideline includes treatment algorithms for stage I-II endometrial cancers, stage I-II cancers with high-risk histologies and stage III-IVA cancers. It details the recommended use of external beam radiation therapy (EBRT), vaginal brachytherapy (VBT) and chemotherapy for patients with different risk profiles, as well as which patients should not receive adjuvant therapy. Key recommendations are as follows:

- Based on a patient's clinical-pathologic risk factors, radiation therapy is recommended to reduce the risk of locoregional recurrence. The choice of EBRT versus VBT in FIGO stage I endometrial cancer should depend on lymph node assessment and uterine risk factors. EBRT is recommended for patients with stage I disease with high-risk features, stage II disease or stage III-IVA disease.
- Systemic chemotherapy should be effectively sequenced with radiation therapy for patients with high-risk histologies and/or stage III-IVA disease to decrease the risk of distant and locoregional recurrence, respectively.
- When EBRT is indicated, the use of intensity-modulated radiation therapy with daily image-guidance is associated with improved patient-reported outcomes and reduced side effects. Recommendations in the guideline also outline optimal radiation dosing, treatment planning and delivery techniques based on the patient's cancer stage and histology.
- For surgical nodal staging, sentinel lymph node mapping is recommended over pelvic lymphadenectomy, and the use of adjuvant therapy should be based on a patient's pathologic ultrastaging status.
- Molecular tumor profiling is recommended and may be used to

guide recommendations for adjuvant therapy.

About the Guideline

The guideline was based on a systematic literature review of articles published through August 2021. The multidisciplinary task force of subject matter experts included radiation oncologists, medical oncologists and gynecological oncologists, a medical physicist, a radiation oncology resident and a patient representative. The guideline was developed in collaboration with the American Brachytherapy Society, the American Society of Clinical Oncology and the Society of Gynecologic Oncology. It is endorsed by the Canadian Society of Radiation Oncology, European Society for Radiotherapy and Oncology, and the Royal Australian and New Zealand College of Radiologists.

The guideline also acknowledges the negative impact of systemic racial disparities on endometrial cancer outcomes. While the guideline is focused on the medical considerations for treatment, the task force also wanted to recognize the complex nature of access to care for underserved patient populations.

ASTRO's clinical guidelines are intended as tools to promote appropriately individualized, shared decision-making between physicians and patients. None should be construed as strict or superseding the appropriately informed and considered judgments of individual physicians and patients.

More information: Matthew M. Harkenrider et al, Radiation Therapy for Endometrial Cancer: An American Society for Radiation Oncology Clinical Practice Guideline, *Practical Radiation Oncology* (2022). DOI: 10.1016/j.prro.2022.09.002

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