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# Recent Advances in Endometrial Cancer Management

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In recent years, growing attempts have been carried out to improve the quality of care in the setting of gynecologic oncology, and, in particular, in endometrial cancer management [1]. Major advances included the introduction of even more sophisticated minimally invasive techniques and personalized treatments (including immune checkpoint inhibitors and targeted therapies) [2–4]. Major advances in the field of endometrial cancer are the use of sentinel node mapping through the use of florescence-guided minimally invasive surgery, the adoption of molecular and genomic profiling, and the introduction of immunotherapy [1,5,6]. Sentinel node mapping has replaced lymphadenectomy in the surgical staging of endometrial cancer [7,8]. Accumulating evidence highlighted that sentinel node mapping is accurate in identifying nodal involvement in low- and high-risk patients [7,8]. Data comparing sentinel node mapping, sentinel node mapping plus backup lymphadenectomy, and lymphadenectomy alone highlighted that sentinel node mapping is not inferior to conventional lymphadenctomy in identifying patients with nodal disease [7,8]. Sentinel node mapping in combination with ultrastaging allows the identification of more patients (twofold increase, approximately) with disease harboring in lymph nodes in comparison to conventional lymphadenectomy [9]. Ultrastaging allows the identification of isolated tumor cells and approximately 50% of micrometastasis not detectable via conventional histopathological analyses [9]. Although no specific data are available on the management of low-volume disease, the detection of isolated tumor cells and micrometastases provides important data regarding prognostication [10]. Furthermore, the introduction of molecular/genomic profiling would be useful in tailoring the most appropriate treatments [1,3]. In the advanced/metastatic setting, molecular characterization provides important information regarding the most appropriate treatments. MMRd/MSI-H is an important (agnostic) biomarker. Approximately, 30% of endometrial cancer patients harbor this type of alteration. Patients characterized by a ultra-mutated (*POLE*) and hyper-mutated (MSI-H) profile are likely to respond to immune checkpoint inhibitors. The GARNET study shows the beneficial effect of dostarlimab monotherapy in MMRd/MSI-H in 2L+ endometrial cancer patients [11]. Similarly, the Study 309 (KEYNOTE-775) highlighted that the combination of immunotherapy and tyrosine kinase inhibitor (i.e., pembrolizumab plus lenvatinib) provides a benefit in all patients [6]. Recently, ongoing studies have begun testing the use of immunotherapy in first-line (alone or in combination with chemotherapy) and maintenance settings (alone or in combination with PARP inhibitors). Moreover, exportin-1 inhibitor (e.g., selinexor) and WEE1 inhibitor seem to correlate with promising anti-tumor activity in TP53 wild type and TP53 mutated tumors [12]. In the era of personalized medicine, efforts are required to identify the best approach for every patient's profile.

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