MINIMALLY INVASIVE SURGERY IN RECURRENT ENDOMETRIAL CANCER A MULTICENTER STUDY

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Introduction/Background Secondary cytoreductive surgery (SCS) is gaining increasing interest in the treatment of endometrial cancer (EC) recurrence. Although the role of minimally invasive surgery (MIS) is well recognized in the initial treatment of EC, there is no data about its safety, in terms of oncological outcomes, in relapsed disease.

Methodology Multicenter retrospective study including patients with first EC relapse subjected to SCS between January 2010 and May 2022. Primary outcome was to compare oncological outcomes of patients subjected to MIS or open SCS. Secondary outcome was to assess factors that could be favorably associated with MIS. Survival was determined from date of first recurrence to last follow-up or cancer-related death and estimated using Kaplan-Meier method. Differences in survival were analyzed using Log-rank test. Binomial logistic regression was performed to evaluate factors that could predict MIS.

Results Data from 210 patients were retrieved. No differences in terms of post relapse and post relapse free survival were highlighted (log-rank test \( p=0.235 \) and \( p=0.628 \) respectively). Body mass index (BMI) \( \geq 30 \), early FIGO stage at diagnosis, single site relapse and the hematogenous pattern of relapse (parenchymal relapse) were positively associated with MIS (respectively BMI \( \geq 30 \) OR 2.216, 95% CI: 1.109–4.430, \( p=0.024 \); early FIGO stage: OR: 4.294, 95% CI: 1.571–11.737, \( p=0.005 \); single site relapse: OR: 2.757, 95% CI: 1.059–7.178, \( p=0.038 \); hematogenous pattern of relapse: OR: 4.322, 95% CI: 1.711–10.918, \( p=0.002 \)). In contrast, patients who received adjuvant radiotherapy at first diagnosis were less probably treated with MIS (OR 0.444, 95% CI: 0.213–0.925, \( p=0.030 \) (figure 1).

Conclusion MIS for recurrent EC did not affect surgical outcomes. The early-stage disease at diagnosis, the single site relapse, the evidence of a single parenchymal metastasis (hematogenous pattern) and a BMI over 30 were positively associated with MIS. Survival was determined from date of first EC relapse to last follow-up or cancer-related death and estimated using Kaplan-Meier method. Differences in survival were analyzed using Log-rank test. Binomial logistic regression was performed to evaluate factors that could predict MIS.

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Conclusion MIS for recurrent EC did not affect surgical outcomes. The early-stage disease at diagnosis, the single site relapse, the evidence of a single parenchymal metastasis (hematogenous pattern) and a BMI over 30 were positively associated with MIS. In contrast, previous radiotherapy was identified as negative predictor.

DISCLOSURES None

MOLECULAR STRATIFICATION OF ENDOMETRIAL CARCINOMA: A STUDY FROM TERTIARY ONCOLOGY CENTRE IN INDIA

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Introduction/Background Endometrial carcinoma (EC) has moved from Bokhman classification (type 1 & 2) to current molecular classification by The Cancer Genome Atlas (TCGA). TCGA stratifies EC into four molecular categories: POLE-ultramutated, Mismatch repair (MMR) deficient, no specific molecular profile, and p53 mutant EC. POLE-umutated group is associated with the best prognosis, while p53 mutant EC has a worse prognosis. We classified previously diagnosed cases of EC into molecular categories.

Methodology In this study, 339 cases of EC were subjected to IHC for MMR protein and p53 expression, and Sanger sequencing for POLE mutation assessment.

Results A total of 339 cases of EC were analysed, with median age of 58 years. The most common subtype of EC included Endometrioid carcinoma (EEC) comprising 71.7% cases, followed by 13% serous carcinoma (SC), 3.5% clear cell carcinoma (CCC), 5% Carcinosarcoma and 6.8% mixed carcinomas.

On FIGO grading, 64.8% were low grade and 35.1% high grade. Most of cases were in Stage I (68.8%), followed by stage III (22.8%), stage II (6.2%) and stage IV (2.2%).

MMR deficiency (dMMR) using IHC was seen in 33.5% cases; of these 81.3% were EEC, 14% mixed carcinoma and 4.7% carcinosarcoma. Most common loss was of MLH1/PMS2 (70.3%), followed by MSH2/MSH6 (11%), MSH6 (11%) and PMS2 (6.3%). Of the dMMR cases 38% showed lymph-vascular emboli (p=0.077). Most of these cases had grade I morphology (77.4%), and stage I presentation (80.4%).

Abstract #855 Figure 1 Endometrioid Carcinoma, FIGO Grade 3 (with cribriform and solid areas with high grade nuclear features). Sanger sequencing shows POLE mutation at Pro436Arg.

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