ONCOLOGICAL OUTCOME OF SENTINEL LYMPH NODE MAPPING OR COMPREHENSIVE SURGICAL STAGING IN PATIENTS WITH NODE-NEGATIVE INTERMEDIATE-RISK ENDOMETRIAL CANCER

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Introduction/Background The role of lymphadenectomy in surgical staging for endometrial cancer remains controversial. The standard of care – consisting of a pelvic and para-aortic lymphadenectomy (LND) – has failed to show survival advantage while leading to an increased peri- and postoperative morbidity. Sentinel lymph node (SLN) mapping has gained popularity, offering a compromise between no nodal staging and complete LND. Multiple studies have demonstrated high detection rates and negative predictive values of SLN mapping with near-infrared fluorescence imaging and indocyanine green (ICG) in endometrial cancer. However, the literature contains limited data on its safety and oncological outcomes. Aim of this study was to evaluate the oncological outcome of SLN mapping in patients with intermediate-risk endometrial cancer.

Methodology In a retrospective, single-center study, we investigated the oncological outcome of patients with stage I intermediate-risk endometrial cancer who underwent surgical staging at our institution between February 2013 and July 2020.

Results Out of a total number of 306 patients with endometrial cancer, 57 patients were diagnosed with node-negative intermediate-risk endometroid endometrial cancer (FIGO IA grade 3, FIGO IB grade 1 or 2). All patients were treated with laparoscopic hysterectomy and bilateral salpingo-oophorectomy with ICG SLN mapping. 31 patients additionally underwent comprehensive surgical staging (four systematic pelvic lymphadenectomies and 27 pelvic and para-aortic lymphadenectomies, LND group). Mean follow up time was 38.0 months. Adjuvant treatment consisted of vaginal brachytherapy in 49 patients, additional chemotherapy in four patients and no adjuvant treatment in eight patients. Between the two cohorts, there were no differences in age or BMI. The mean number of lymph nodes removed (4.04 vs. 45.5), the duration of the surgical procedure (131.3 vs. 287 minutes) as well as the intraoperative blood loss (101.9 vs. 258.1 ml) were significantly higher in the LND group (p=0.000, 0.000 and 0.026, respectively). Recurrence rates (7.7% SLN, 9.7% LND, p=0.585) and death due to disease (3.8% SLN, 3.2% LND, p=0.709) were similar between the two groups. Further on, there was no statistically significant difference in overall and recurrence free survival for patients with SLN mapping only compared to the LND cohort (p=0.541 and 0.480, respectively).

Conclusion In our cohort, the use of ICG SLN mapping alone did not impair oncological outcome compared to a complete lymphadenectomy. It therefore might provide an efficient alternative of nodal staging with less morbidity in intermediate-risk endometrial cancer patients. However, prospective studies on larger numbers of patients are needed to confirm our findings.

Disclosures No disclosures.
regression was performed to identify independent predictors of unilateral/bilateral detection.

**Results** He mean age and BMI was 66.9 years and 31.8 Kg/m², respectively. 90 women (52.3%) were diagnosed with endometrioid histology, whilst 82 with other high-risk histology. In total, 321 SLNs were removed, whilst at least one SLN was obtained in 151 women for a detection rate of 87.8%. In 106 women (61.6%) bilateral SLNs were successfully mapped. On average 1.87 (0–5) SLNs were detected per patient. SLNs were most commonly identified in the external iliac basins (78.2%), followed by the obturator fossa (10.3%), internal iliac basins (5.9%), common iliac basins (3.7%), pre-sacral (0.93%) and para-aortic region (0.93%), respectively. Lymph node metastasis was detected in 25 women (14.5%). There was no statistical correlation between the SLN detection and the age, BMI, grade and histology, respectively. The bilateral SLN detection was adversely correlated with grade 3 (rho=-0.29, p-value=0.0001) and high-risk histology (rho=-0.43, p-value=0.0001). In multivariate analysis, both grade (OR=0.21, p-value=0.005) and high-risk histology (OR=0.39, p-value=0.04) remained significant. Only three cases of Grade 1 lower extremity lymphoedema were reported.

**Conclusion** Intra-operative SLN mapping using fluorescence imaging with ICG in EC patients is feasible, yields high detection rates and reduces the lymphadenectomy-associated morbidity. Further studies are warranted to evaluate its accuracy in high-risk EC.

**Disclosures** We certify that no party has a direct interest in the results of the study and that no benefit will be conferred to us or any organisation with which we are associated.

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**Fertility pregnancy**

**FERTILITY-SPARING TREATMENT IN ADVANCED BORDERLINE OVARIAN TUMORS. AN ANALYSIS FROM THE MITO14 STUDY DATABASE**

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**Introduction/Background** For advanced borderline ovarian tumors (BOTs), data concerning the efficacy and safety of fertility-sparing surgery (FSS) are very limited. The MITO14 is a multi-institutional retrospective study conducted among MITO Centres with the aim of systematically collecting data from consecutive BOT patients. In the present analysis, data are presented on women with advanced BOT registered into the MITO14 database and conservatively treated between January 1995 and December 2019.

**Methodology** The objectives were: i) to evaluate the recurrence rate and to determine predictors of recurrence; ii) to assess the impact of a FSS on disease-free survival (DFS) and disease-specific survival (DSS); iii) to evaluate pregnancy and live birth rates following treatment.

Only patients undergoing FSS and with histologically proven FIGO2014 stage II – III BOTs at final pathology were included. Cases submitted to bilateral salpingo-oophorectomy with uterine preservation were eligible. The following exclusion criteria were considered: i) age >45 years; ii) presence of second tumor(s) requiring therapy interfering with the treatment of BOT.

**Results** A total of 101 patients were recruited. The median follow-up time from primary cytoderection was 124 months (IQR range 80–177.5). Fifty-five patients (54.5%) experienced at least one recurrence (median time to first relapse 21 months, IQR range 9–53), 53 of whom (96.3%) undergoing