Results Five studies were included in the current analysis enrolling 223 women (191 with EC and 32 with CC) and 484 SLNs. The quality of the included studies was high. The number of the examined SLNs per patient ranged between one and five. The pooled sensitivity and specificity was 0.84 (95% CI 0.64 – 0.94, I²=34.59%) and 0.95 (95% 0.88 – 0.98, I²=87.58%), respectively. The pooled LR+ and LR- was 17.07 and 0.17, respectively. The pooled DOR was calculated 100.38 (95% CI 34.21 – 294.52, I²=85.24%). The SROC curve yielded an AUC of 0.95 (95% CI 0.93 – 0.97).

Conclusion The current evidence suggests that the OSNA assay is a useful and accurate technique for the intra-operative detection of SLN metastasis in early-stage EC and CC. The combined analysis using SLNs and OSNA assay is seemingly an attractive approach to tailor individualised management. The impact of micro-metastasis and isolated tumour cells on the prognosis of women with apparent early-stage EC and CC remains debatable and should be addressed in future research. As this evidence is preliminary, cross-institutional collaboration is warranted.

Disclosures Professor SK declares personal fees for consulting from Roche and Astra-Zeneca, outside the submitted work. The remaining authors certify that no party has a direct interest in the results of the research and that no benefit will be conferred to us or any organisation with which we are associated.

Endometrial cancer

RISK OF ENDOMETRIAL TUMORS – A DANISH NATIONWIDE COHORT STUDY

Kristian Reinholdt, Susanne Krüger Kjaer, Sonia Gulenia, Kirsten Frederiksen, Lene Møllemkjær, Christian Munk, Allan Jensen, Virus, Lifestyle and Genes, Danish Cancer Society Research Center; Virus, Lifestyle and Genes, Danish Cancer Society Research Center; Department of Obstetrics and Gynecology, Rigshospitalet, University of Copenhagen; Statistics and Pharmacoepidemiology, Danish Cancer Society Research Center

Introduction/Background The few studies investigating a potential association between benign ovarian tumors and endometrial cancer have been inconclusive. Using data from a large Danish register-based cohort study, we assessed the overall and type-specific risk of endometrial cancer among women with a benign ovarian tumor.

Methodology We identified all Danish women diagnosed with a benign ovarian tumor during 1978–2016 in the Danish National Patient Register (n = 149,807). The study population was followed for subsequent development of endometrial cancer by linkage to the Danish Cancer Register and standardized incidence ratios (SIRs) with corresponding 95% confidence intervals (CIs) were calculated after correction for hysterectomy.

Results Women with benign ovarian tumors had a decreased incidence of endometrial cancer (SIR = 0.74, 95% CI: 0.68–0.81) compared with women in the general Danish female population. Both solid benign ovarian tumors (SIR = 0.79, 95% CI 0.70–0.88) and cystic benign ovarian tumors (SIR = 0.68, 95% CI 0.58–0.78) were associated with decreased incidences of endometrial cancer. Likewise, women with benign ovarian tumors had decreased incidences of both type I and type II endometrial cancer. The incidence of endometrial cancer was decreased to virtually the same magnitude irrespective of the age at diagnosis of a benign ovarian tumor and the
THE ONCOLOGIC OUTCOME AFTER FERTILITY-SPARING HORMONAL MANAGEMENT MORE THAN 9 MONTHS TREATMENT FOR EARLY STAGE ENDOMETRIOID ENDOMETRIAL CANCER

Su Hyun Chae, Seung-Hyuk Shim, Sun Joo Lee. Konkuk Medical Center

Introduction/Background Hormonal management is an alternative treatment for preserving fertility in patients with early stage endometrioid endometrial cancer (EC). The safety and clinical outcome in longer treatment more than 9 months has controversial. This study aimed to define the oncologic outcomes after hormone therapy more than 9 months for endometrioid EC.

Methodology We retrospectively analyzed patients presumed to have stage IA, grade 1--2 endometrioid EC who underwent fertility-sparing treatment. Concurrent medroxyprogesterone (MPA) and levonorgestrel-release intrauterine devices were used for treatment. The remission rate and progression-free survival were analyzed each of the short term treatment who had treatment under 9 months and long term groups who had treatment duration over 9 months.

Results One hundred twenty patients presumed to have stage IA, grade 1 endometrioid EC had treated with hormonal medication for fertility sparing. The median age was 33.5 (range 22–43) years old and the median treatment duration was 10.7 (3–102) months. The complete remission (CR) rate was 84.2% (101/120) and the median time interval to CR was 9.3 (2–84) months. The median follow-up time was 32.9 (1–130) months. The recurrence rate was 31.7% (38/120) and the median time to recurrence was 11 (1–92) months. The cumulative CR rate by 3, 6, 9, 12, 15, 18, 24 months was 21.7%, 36.7%, 50.8%, 61.7%, 70.8%, 74.2%, and 78.3% respectively. The CR rates in group A and B were 86.7% and 82.7% in group A and B. The recurrence rates in two groups were 35.6% and 29.3%, respectively.

Conclusion Fertility sparing treatment with high dose progesterin over 9 months in early stage endometrioid EC has showed high rate of CR. However, medical treatment over 9 months should counsel with patients in detail and oncologists should make careful decision.

Disclosures We have no disclosures.

THE ADDED VALUE OF SENTINEL NODE MAPPING IN ENDOMETRIAL CANCER

Liron Kogan, Emad Matanes, Michel Wissing, Cristina Mitric, Shannon Salvador, Susie Lau, Walter Gottlieb.

Introduction/Background Endometrial cancer (EC) is the most common gynecological malignancy worldwide, with an estimated 382,069 new cases and 89,929 deaths in 2018. Lymph node involvement represents one of the most important prognostic factors and guides better planning of post-operative adjuvant treatment. Whereas lymph node assessment has been included in surgical staging since 1988, the optimal procedure for lymph node evaluation is controversial, ranging from full pelvic and para-aortic lymph node dissection (LND) to complete omission of LND. We previously evaluated the oncologic outcomes of 472 cases of EC (SLN with LND vs. LND alone) and demonstrated significantly lower likelihood of pelvic sidewall recurrences in patients who underwent SLN. These data raised the possibility that addition of SLN biopsy may not just be equivalent to conventional staging but may actually increase the detection of metastatic disease, resulting in better stratification of patients into risk groups, optimal adjuvant therapy prescription and as a result, better oncologic outcomes. In this study, we investigated the long-term oncological outcome of adding SLN to pelvic LND in patients with EC.

Methodology Retrospective study comparing survival outcomes (overall survival (OS), disease-specific survival (DSS), progression-free survival (PFS), recurrence-free survival) between endometrial cancer patients undergoing surgical staging, which included LND with or without SLN in non-overlapping contiguous eras. Hazard ratios (HR) and their respective 95% confidence intervals (95%CI) were calculated using Cox proportional hazard models.

Results 193 patients underwent LND and 250 patients had SLN mapping prior to LND. Clinical characteristics, including adjuvant therapy use, were similar between groups. During a median follow-up period of 6.9 years, addition of SLN was associated with more favorable oncological outcomes compared to LND with 6-year OS of 90% compared to 81% (p=0.009), and PFS of 85% compared to 75% (p=0.01) respectively. SLN was associated with improved OS (HR 0.5, 95% CI 0.3–0.8, p=0.004), DSS (HR 0.5, 95%CI 0.2–1.0, p=0.05) and PFS (HR 0.6, 95% CI 0.4–0.9, p=0.03) in a multivariable analysis as well, adjusted for age, ASA score, stage, grade, non-endometrioid histology, and LVSI. Patients who were staged with SLN were less likely to have a recurrence in the pelvis or lymph node basins compared to patients who underwent LND only (6-year recurrence-free survival 95% vs 90%, p=0.04).

Conclusion Addition of SLN was associated with improved clinical outcomes compared to LND alone in patients with endometrial cancer undergoing surgical staging.

Disclosures We have no disclosures.

OMITTING LYMPHADENECTOMY IN OBESE ENDOMETRIAL CANCER PATIENTS UNDERGOING SENTINEL LYMPH NODE MAPPING: WHEN MORE IS LESS

Liron Kogan, Emad Matanes, Cristina Mitric, Shannon Salvador, Susie Lau, Walter Gottlieb. McGill University; Division of Gynecologic Oncology, Jewish General Hospital; McGill University

Introduction/Background The prevalence of obesity in the United States has tripled over the last 40 years. Obesity is a significant risk factor for endometrial cancer (EC). Sentinel lymph node (SLN) sampling has been applied for EC surgery.