Abstract 2022-RA-154-ESGO Figure 1  Histopathologic findings in ovaries of pregnant mice exposed to chemotherapy. (A) Short exposure experiment (sacrifice at GD 15.5). (B) Long exposure experiment (sacrifice at GD 18.5). (C) Overview of normal ovary containing preantral (p: primary, s: secondary), antral (an: antal, an*: antal preovulatory), and atretic (ar) follicles, and corpora lutea (c). (D) Normal preantral follicle. (E) Apoptosis in preantral follicles, arrows indicate apoptotic cells. (F) IHC of Caspase-3 in preantral follicle, arrows indicate positively stained granulosa cells. (G) Necrosis of granulosa cells of the follicle, star indicates area of necrotic cells. Scale bars: C=100 μm, D-F=10 μm, G=20 μm.

Abstract 2022-RA-154-ESGO Figure 2  Phospho-H2AX Immunohistochemistry of primordial follicles in pregnant mice of short exposure experiment. (A) Expression versus non-expression of phospho-H2AX in primordial follicles per treatment modality (n = 6 mice in control group and n = 3 mice per chemotherapeutic agent). Examples of staining of primordial follicles in (B) control group (non-expression), (C) carboplatin group (expression), and (D) cyclophosphamide high dose group (expression). Arrows indicate primordial follicles. Scale bar: B-D = 10 μm.

Conclusion Despite physiological ovarian function suppression during gestation, chemotherapy-induced damage of the ovaries occurs in pregnant mouse models, potentially affecting future fertility.

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2022-RA-160-ESGO  FERTILITY PRESERVATION IN PATIENTS WITH EARLY CERVICAL CANCER AFTER ORGAN-SPARING SURGERY: RETROSPECTIVE MONOCENTRIC STUDY

Olga P Matylevich, Ilya A Tarasau, Iryna Y Bakinouskaya, Sviatlana Y Shelkovich. NN Alexandrov National Cancer Centre of Belarus, Minsk, Belarus; Belarussian Medical Academy of Postgraduate Education, Minsk, Belarus

Introduction/Background To assess the desire for motherhood, reproductive and obstetric outcomes in young patients with early cervical cancer treated with fertility-sparing surgery (FSS).

Methodology All women ≤ 45 years who underwent FSS for early cervical cancer (stages IA1-IB1) at NN Alexandrov National Cancer Centre of Belarus between January 2010 and December 2020 were retrospectively identified. Fertility-sparing options included cold knife conization (CKC) in 46 patients, CKC and pelvic lymph node dissection (PLND) – in 12, abdominal radical trachelectomy (ART) – in 46, and laparoscopic radical trachelectomy (LRT) – in 12. Data on reproductive intentions and fertility outcomes were reviewed from medical records and questionnaires.

Results A total of 116 patients were analyzed. Six patients after CKC lacked data on obstetric outcomes and 3 had amenorrhea after ART. Reproductive outcomes were studied in 107 patients. Follow-up time was a median of 50.8 months (range, 16.4–92.7). During follow-up 46 out of 107 (43.0%) patients attempted to conceive. All 14 pregnancies in 11 patients were achieved spontaneously, clinical pregnancy rate was 23.9% (11/46). While there were 2 first trimester spontaneous abortions, 2 pregnancies ended in the first trimester due to a missed abortion, and 1 ended an ectopic tubal pregnancy, and two pregnancies are ongoing. Seven of 14 pregnancies (50.0%) resulted in live births born at term. All deliveries (7) are noted in patients whom CKC or CKC and PLND were performed.

Conclusion Less than half (43.0%) of the cohort maintained reproductive intent after FSS. All conceptions were spontaneous and occurred in 23.9%, which reflects the need for widespread use of assisted reproductive technologies in this category of patients. In terms of reproductive outcomes, CKC had clear advantages of a less invasive surgical approach compared to ART and LRT.

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2022-RA-185-ESGO  RESULTS AFTER CONSERVATIVE SURGERY OF STAGE II/III SEROUS BORDERLINE OVARIAN TUMORS

Sebastien Gouy, Sophie Maria, Amandine Moulard, Stephanie Scherier, Francois Zaccarini, Patricia Pautier, Alexandra Leary, Catherine Geneste, Cyrus Charnig, Philippe Morke. Gustave Roussy, Villejuif, France

Introduction/Background The aim of this study was to assess the outcomes of a large series of patients treated conservatively for stage II or III serous borderline tumors of the ovary (SBOTs) with a long-term follow-up.

Methodology Patients with SBOTs and peritoneal implants, treated in or referred to our institution, were retrospectively reviewed. Outcomes of patients treated
conservatively (preservation of the uterus and at least a part of one ovary) to promote subsequent fertility were specifically analyzed.

Results Between 1971 and 2017, 212 patients were identified and followed-up. Among these patients, 65 underwent conservative treatment; eight patients had invasive implants. Among patients treated conservatively, 38 (58%) patients recurred. Twenty-eight recurrences were observed under the form of borderline tumor on the spared ovary and/or noninvasive implants, but eight patients had a recurrence under the form of invasive disease. Compared with radical surgery, the use of conservative treatment (p < 0.0001) was a prognostic factor on disease-free survival (DFS), but without an impact on overall survival (OS). Nevertheless, three deaths occurred. Twenty-four pregnancies (13 spontaneous) were observed in 20 patients (29 patients wanted to become pregnant).

Conclusion In this series collecting the largest number of patients undergoing conservative surgery for stage I/II SBOTs, spontaneous pregnancies can be achieved after conservative treatment of advanced-stage disease, but the recurrence rate is high and three deaths were observed. These patients were spared their fertility but with a high rate of recurrence. Uncertainties regarding the safety of conservative treatment should be exposed to these patients.