we are the ones commonly relied on in many settings worldwide.

Disclosures Gynecologic oncologists should be proactively involved in the management of PAS.

#282 UTERINE TRANSPOSITION VERSUS UTERINE VENTROFIXATION BEFORE RADIOThERAPY AS A FERTILITY SPARING OPTION IN YOUNG WOMEN WITH PELVIC MALIGNANCIES: SYSTEMATIC REVIEW OF THE LITERATURE AND DOSE SIMULATION

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Introduction/Background Neoadjuvant (chemo)radiation may be required treatment of pelvic malignancies in female patients of reproductive age. Irradiation may result in a damage to ovarian and uterine function, compromising the ability of those patients to conceive. While ovarian transposition is an established method to move the ovaries away from the irradiation field, similar surgical procedures regarding the uterus remain investigational. The aim of this study was to carry out a systematic review of the literature on uterine displacement techniques (ventrofixation/transposition) and to simulate the radiation dose received by the uterus in different heights place after the procedures.

Methodology The systematic review was conducted in accordance with the PRISMA guidelines. The study protocol was registered on PROSPERO (CRD42023391278). Retrospectively, a dosimetric study was performed to assess the dose received by the uterus according to hypothetical different displacement positions taking the case of irradiation for rectal or anal cancer as model.

Results A total of 187 studies were included in the initial research, after the screening 9 studies were selected for qualitative synthesis. Data from the dose simulation revealed that in the anatomical position the maximum and median doses were for the rectal cancer 46.5 and 25.2 Gy and for the anal cancer 58.4 and 34.5 Gy respectively. The transposition approach was the most protective with a maximum dose of about 3 and 8 Gy for anal and rectal cancer. None of the simulated US ventrofixation positions, in both cases, received a Dmean surpassing 14 Gy, and the US volumes receiving 14 or 20 Gy for all simulated ventrofixation positions were remarkably small.

Conclusion According to the literature review and the simulation results of the present study we may conclude that simple elevation of the uterus by ventrofixation of the fundus could be considered as a fertility sparing approach in young rectal/anal cancer patients.

Disclosures none

#334 MIDDLE CEREBRAL ARTERY PEAK SYSTOLIC VELOCITY MONITORING OF FETAL ANEMIA DURING CHEMOTHERAPY ADMINISTRATION IN PREGNANCY

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Introduction/Background During administration of chemotherapy in pregnancy, the fetus is at risk of developing fetal anemia. Severe fetal anemia may cause hydrops and possibly fetal demise. Therefore, there is a need of regular monitoring within the chemotherapy treatment. Aim of this study is to identify and monitor fetal anemia using Middle Cerebral Artery Peak Systolic Velocity during administration of chemotherapy in pregnancy.

Methodology In this prospective study, 15 patients were diagnosed with cancer in pregnancy and were treated with chemotherapy. Middle Cerebral Artery Peak Systolic Velocity (MCA-PSV) was used to establish whether the fetus is anemic.
Patients were scheduled for ultrasound examination of MCA-PSV – 1st on the day of the administration of chemotherapy, 2nd examination on the 10th day after the administration. The measurement technique according to Mari et Barr was used. Multiples of median (MoM) were calculated using Medicina Fetal Barcelona calculators. According to value of MoM, the severity of anemia is determined. When moderate or severe anemia is identified, in selected cases the administration of chemotherapy is postponed. Also, newborn blood count was performed right after delivery.

**Results** Fetal anemia was detected in 4 patients. Using MCA-PSV, we have detected moderate fetal anemia in 2 patients and severe fetal anemia in 1 patient. In 2 patient, mild anemia was detected using newborn blood count. In 1 patient, chemotherapy administration was postponed because of detection of moderate fetal anemia, in 2 patients the treatment protocol was modified.

**Conclusion** In all 4 fetal anemia cases, the combination of chemotherapy agents, cisplatin and iphosphamide, was used as treatment. In other drug combinations, there was no fetal anemia detected. We suggest that for chemotherapy-induced fetal anemia, MCA-PSV is reliable method for fetal anemia monitoring and should be included into the treatment protocol.

**Disclosures** No conflict of interest (all authors)

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**Abstract #374**

**CERVICAL EXCISIONAL TREATMENT INCREASES THE RISK OF INTRA-AMNIOTIC INFECTION IN SUBSEQUENT PREGNANCY COMPLICATED BY PRETERM PRELABOR RUPTURE OF MEMBRANES**

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**Introduction/Background** Excisional treatment of cervical intraepithelial neoplasia or very early stages of cervical cancer increases the risk of preterm prelabor rupture of membranes (PPROM) in subsequent pregnancies. The subset of PPROM with a history of cervical excisional treatment could also be jeopardized by a higher risk intra-amniotic infection/inflammation. However, there is a paucity of relevant information on this field.

**Methodology** To assess the differences in the rates of intra-amniotic infection/inflammation and early-onset neonatal sepsis between singleton PPROM pregnancies without and with a history of cervical excisional treatment and to identify an association between these complications of PPROM and the excised cone length.

This retrospective cohort study included PPROM pregnancies in whom transabdominal amniocentesis was performed as part of standard clinical management to determine intra-amniotic environment. Women were divided into four subgroups according to microbial invasion of the amniotic cavity and/or intra-amniotic inflammation.

**Results** A history of cervical excisional treatment was found in 10% (76/765) of the women. Of these, 82% (62/76) had a history of only one treatment. Women with a history of one cervical excisional treatment had higher rates of presence of both microbial invasion of the amniotic cavity and intra-amniotic inflammation [with: 25% (19/76) vs. without: 12% (85/689), adj. OR: 2.5, adj. p = 0.004], microbial invasion of the amniotic cavity without inflammation [with: 25% (19/76) vs. without: 11% (74/689), adj. OR: 3.1, adj. p < 0.0001], and early-onset neonatal sepsis [with: 8% (11/76) vs. without: 3% (23/689), adj. OR: 2.9, adj. p = 0.02] than those without cervical excisional treatment.

**Conclusion** History of cervical excisional treatment increases risks of intra-amniotic infection, microbial invasion of the amniotic cavity without inflammation, and development of early-onset neonatal sepsis in a subsequent pregnancy complicated by PPROM.

**Disclosures** University Hospital Hradec Kralove and Charles University, Faculty of Medicine in Hradec Kralove, Czech Republic.

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**Abstract #381**

**IMPROVING OF THE OVARIAN TISSUE CRYOPRESERVATION PROCEDURE IN FERTILITY PRESERVATION PROGRAMS**

Erica Silvestris*, 1Vera Loizzi, 1Anila Kardhashi, 2Ambrogio Cazzolla, 3Francesca Arezzo, 2Michela Mongelli, 4Carla Minio, 4Attilio Guarini, 4Ortudia Popescu, 5Anna Altavilla, 6Giuseppe De Palma, 6Raffaella Depalo, 1Anila Kardhashi.
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**Introduction/Background** The majority of females candidate to receive anti-cancer treatments are at risk to develop the ‘cancer treatment related infertility’ (CTRI). Beyond oocyte and embryo cryopreservation as fertility preservation (FP) procedure in females cancer survivor, early ovarian tissue cryopreservation and subsequent reimplantation at the cancer healing, has been recently proposed as alternative procedure. We report our experience including results in approaching the freezing of human ovarian cortex samples by the slow freezing (SF) vs the ultra-rapid freezing (URF) procedure.

**Methodology** Ovarian cortex biopsies were collected from 11 fertile women with a mean age of 31, affected by benign gynecologic diseases or early stage urogynecologic malignancies (no ovarian tumors), with 5-year survival chance >50%, without: 11% (74/689), adj. OR: 3.1, adj. p < 0.0001], and early-onset neonatal sepsis [with: 8% (11/76) vs. without: 3% (23/689), adj. OR: 2.9, adj. p = 0.02] than those without cervical excisional treatment.

**Conclusion** History of cervical excisional treatment increases risks of intra-amniotic infection, microbial invasion of the amniotic cavity without inflammation, and development of early-onset neonatal sepsis in a subsequent pregnancy complicated by PPROM.

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