after bilateral augmentation. Upon admission, there were no obvious signs of neoplasia or lymphadenopathy. According to ultrasound of the mammary glands and regional lymph nodes, there were no changes outside the periprosthetic capsule. A fine-needle aspiration biopsy was performed. Immunocytochemical examination of periprosthetic fluid: tumor cells positive for CD30, CD4, CD2, negative for ALK, Pan SC (AE1/ AE3), which corresponds to the diagnosis of BIA-ALCL. Ultrasound of the pelvic organs, abdominal cavity, MRI of the chest (non-contrast): bilateral seromas on the periphery of breast implants, absence of other pathological formations (stage IA according to the TNM classification) (figure 1). Surgical treatment with the explantation of endoprostheses and the surrounding fibrous capsule in a single block on both sides at 29 weeks GA.

Results Dynamic monitoring with no signs of progression up to vaginal delivery (40 weeks GA) was performed. A healthy girl, Appar 8/9, was born. Follow-up including 18F-FDG PET/CT was performed 3 and 12 months after delivery: no pathological changes were detected.

Conclusion The described case complements the limited available data on this topic, emphasizing that BIA-ALCL should be taken into account for diagnosis in the presence of spontaneous periprosthetic seroma with late onset even during pregnancy and that histodiagnostic signs of the disease do not differ in a pregnant woman.

Disclosures None

ROBOTIC PELVIC LYMPHADENECTOMY IN PREGNANT WOMEN WITH CERVICAL CANCER – TWO CASE REPORTS

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Introduction/Background Cervical cancer represents one of the most commonly diagnosed tumours in pregnancy. Robotic surgery is considered as the feasible method of surgical staging of the early-stage cervical cancer. There are very limited data on the robotic lymphadenectomy in pregnant patients with cervical cancer.

Results We present two clinical cases of robotic lymphadenectomy in pregnant patients with cervical cancer. The first patient was a 43-year-old nulliparous woman who underwent a loop electrosurgical excision (LEEPZ) in the 15th week of pregnancy and was diagnosed with adenocarcinoma of the cervix pT1b. She underwent a robotic pelvic lymphadenectomy with minimal blood loss and no complications in the 18th week of gestation with negative histology. After 9 cycles of neoadjuvant chemotherapy the pregnancy was terminated by a caesarean section with a radical hysterectomy and bilateral salpingooophorectomy in the 31st week of pregnancy. The second patient was a 31-year-old nulliparous woman who underwent a LEEFTZ in the 16th week of pregnancy and was diagnosed with squamous cell carcinoma of the cervix with positive endocervical margin of the cone. The patient underwent a resection with a robot assisted systemic pelvic lymphadenectomy with histologically negative lymph nodes. The procedure was associated with minimal blood loss and no intra- or postoperative complications. The patient refused a planned caesarean section with a radical surgical treatment in the 35th week of pregnancy and she gave birth in the 39th week of pregnancy by planned caesarean section to a healthy newborn. A close follow-up is ongoing.

Conclusion A robotic pelvic lymphadenectomy is a feasible and effective method of lymph node staging of the early-stage cervical cancer in pregnant women associated with minimal blood loss and low complication rate. A histopathological lymph nodes assessment plays an essential role in planning the therapeutical approach in pregnant women with cervical carcinoma.

Disclosures None

CHEMOTHERAPY DURING PREGNANCY IS ASSOCIATED WITH INCREASED GENOTOXICITY AND MUTATIONAL LOAD IN THE FETAL HEMATOPOIETIC COMPARTMENT

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Introduction/Background Prenatal exposure to chemotherapy is shown to not impair the health of children (up to age 9). However, genotoxic chemotherapeutics can cross the placenta and could potentially affect the fetal DNA.

Methodology Cord blood mononuclear cells (CBMCs) were collected from (i) pregnant breast or cervical cancer patients treated with chemotherapy regimens including carboplatin (n=7), (ii) pregnant breast cancer patients treated with chemotherapy regimens not including carboplatin (n=2), (iii) pregnant Hodgkin lymphoma patients treated with a combination of doxorubicin, bleomycin, vinblastine and dacarbazine (ABVD, n=6), (iv) non-treated pregnant breast cancer patients (n=5), and (v) healthy pregnant women (n=17). Samples were subjected to (a) cytokinesis-block micronucleus analysis to map genotoxicity via micronucleus frequencies, and (b) whole-genome sequencing of clonally expanded single cord hematopoietic stem cells (eHSCs) to identify mutational load and the presence of known exposure-related mutational signatures.

Results Micronucleus frequency was significantly increased in CBMCs from chemotherapy-treated cancer patients (2.35%) and untreated breast cancer patients (1.83%), compared to healthy pregnant women (0.69%; p<0.0001), suggesting that