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.

Abstract #493 Figure 1 Anaplastic large cell lymphoma associated with a breast implant (BIA-ALCL) in a pregnant patient: Non-contrast chest MRI: bilateral seromas on the periphery of breast implants, with a large accumulation of fluid on the left

Results Dynamic monitoring with no signs of progression up to vaginal delivery (40 weeks GA) was performed. A healthy girl, Apgar 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 Nothing to disclose

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

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 (LEETZ) 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 salpingoophorectomy in the 31st week of pregnancy. The second patient was a 31-year-old nulliparous woman who underwent a LEETZ 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 systematic 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

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

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 (cHSCs) 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
both the maternal cancer condition, and prenatal chemotherapy exposure are associated with genotoxic stress in CBMCs. Whole-genome sequencing revealed a significant increase in mutational load in chSCs of all treated cases (n=12), versus healthy pregnant women (n=3; p=0.04). A platinum-specific mutational signature was found in chSCs from patients treated with carboplatin, suggesting a direct effect of the drug on the fetal genome. chSCs from patients treated without carboplatin showed age-related signatures, pointing to a more indirect effect upon prenatal chemotherapy exposure. Additionally, in a pilot study we observed an increased number of structural chromosomal variants in single CBMCs of n=1. boplatin showed age-related signatures, pointing to a more indirect effect upon prenatal chemotherapy exposure. Additionally, in a pilot study we observed an increased number of structural chromosomal variants in single CBMCs of n=1

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ANENCEPHALUS FETUS IN PREGNANT WOMAN WITH ASYMPTOMATIC LARGE RETROPERITONEAL TUMOUR

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Introduction/Background Retroperitoneal tumours are rare tumours, which could be defined as cystic or solid masses in imagistic investigations and could be divided in benign or malignant tumours. More than 70% of the primary retroperitoneal masses are malignant. The most common in this region are sarcomas. Also epithelial malignancies, lymphomas and metastases of different germ cell tumours may appear in the retroperitoneum. From the benign lesions most frequent are lipomas, fibromas and benign neurogenic tumours. During pregnancy, both benign and malignant retroperitoneal tumours are extremely rare.

Results We present the case of a 34 years old VIIIG VIIIP pregnant patient, recently admitted to our hospital for uterine contractions. The ultrasound examination diagnosed a gigantic abdominal mass and a 20 weeks pregnancy with an anencephalic fetus. After counselling the patient, the medical abortion was induced. CT was performed after and so we had the imaging of 20/15/13 cm tumour with a mixed, incapsulated structure, predominantly liquid, with parenchymal areas inside, heterogeneously iodophilic, with focal calcifications and a regular outline. The tumor develops from the left intersplenorenal space and occupies the entire left half of the abdomen. For our patient the surgery was recommended, but she refused it, because the symptoms were minor, excepting the deformation of the anterior abdominal wall.

Conclusion Contrast-enhanced computed tomography (CT) and MRI are the most important in diagnosing this type of tumours, but the differential diagnosis of these masses in retroperitoneum - malignant or benign, is done by histopathology. Usually, no symptoms appear until retroperitoneal tumours reach an important volume, so they are incidental diagnosed during investigations for nonspecific complaints. First step of treatment is surgery with complete tumour resection followed by anatomopathology and the management will be choose for the best prognosis of the patient.

Disclosures I do not have any conflict of interest with any person or organization.

#658

A CLINICAL CASE OF NON-HODGKIN’S B-CELL LYMPHOMA OF RARE LOCALIZATION (OVARIIES) DURING PREGNANCY IN A PATIENT WITH A CFTR GENE MUTATION CAUSING CYSTIC FIBROSIS

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Introduction/Background Primary ovarian site manifestation of lymphomas are sporadic neoplasms, accounting 0,2–1,1% of all cases of extranodal non-Hodgkin’s B-cell lymphoma predominantly with unfavorable prognosis. The accompanying of these diseases with pregnancy is an extremely rare condition that causes difficulties in diagnosis and treatment.

Methodology Pregnant thirty-nine-year-old patient after In vitro fertilization with Pre-implantation Genetic Diagnostics due to mutation in the CFTR gene which was diagnosed after cystic fibrosis (with severe lung/digestive system disorders) in the first child. At gestational age (GA) 24 weeks ORADS-4 ovarian neoplasm was detected. Non-contrast MRI discovered a solid lesion measuring 14,5x8,8x10,5cm in the left ovary with signs of true diffusion restriction and ascites. Due to pain, peritoneal symptoms an emergency operation was performed: laparotomy, left adnexectomy, omentectomy (due to preoperative rupture of the tumor with hemorrhage and adhesions to the omentum). Morphologically high-grade B-cell lymphoma, not otherwise specified (HGBL-NOS) with Ki67<97% was detected (figure 1). After whole body MRI scanning tumor changes of the paraaortic lymph nodes were diagnosed. Taking into account strong wish of patient to maintain pregnancy, the high-grade lymphoma, the risk of worsening the prognosis the DA-EPOCH-R chemotherapy was initiated.

Abstract #658 Figure 1 Malignant neoplasm of the left ovary (lymphoma) during pregnancy.