A METHOD FOR SAFE OVARIAN TISSUE TRANSPLANTATION AFTER NEOPLASIA

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Introduction/Background In this case we suggest an alternative method to the time-consuming and invasive method of the xenograft implantation (ovarian tissue) to nude-mice. We herein report a nulliparous 36-years-old woman ovarianized due to borderline ovarian tumors in right (52X30mm) and left (83X53mm) ovary (Ca125=79,6).

Methodology She underwent bilateral salpingo-oophorectomy, omentectomy, sentinel lymph node dissection and appendicectomy. According to the pre-surgical consent we retrieved a piece of ovarian cortex from a macroscopically healthy portion of the left ovary. In the IVF lab the biologist cut it in 18 microsamples 2by2mm and kept them in 4 vials following slow-freezing protocol. After eight months one vial with 9 slices was thawed rapidly, 3 were directly embedded in paraffin for immunohistochemical analysis, 3 were placed in 2D culture and 3 were placed in 3D culture conditions.

Results No malignant cell was observed and microscopically the slice concerned part of ovarian cortex with stroma including one oocyte. One year after uneventful follow-up we thawed 2 vials giving 1 of 8 slices for frozen section (negative). We took abdominal wash cytology (negative) and created a left lateral peritoneal pocket inducing a graft of Surgicel with the ovary-slices with no sutures. Three months later we noticed the first endocrine restoration (pre-op E2<5 and then E2=54) and five months post-op her menstrual period came. The patient is disease-free 3 years now.

Conclusion In vitro cyto-culture is a new approach to control the ovarian tissue re-implanted in cancer survivors. Until now there are no clinicopathological findings to contraindicate stimulation and proceed to IVF.

Disclosures

FIRST RESULTS OF A MULTIDISCIPLINARY ADVISORY BOARD TACKLING CANCER IN PREGNANCY CASES: THE ADVISORY BOARD ON CANCER, INFERTILITY AND PREGNANCY

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Introduction/Background Due to the rarity of cancer during pregnancy, physicians may not always be up to date with all treatment options available during pregnancy. The Advisory Board on Cancer, Infertility and Pregnancy (ABCIP) was established to help physicians make decisions about the optimal cancer treatment for their pregnant patients.

Methodology The ABCIP is a collaboration of different national and regional advisory boards that work independently on the platform and discuss incoming advice requests from their region or country within their own board. Physicians treating a patient with a cancer diagnosis during pregnancy or a patient with a fertility preservation question can register their cases anonymously and free of charge on the ABCIP platform (www.ab-cip.org) by completing a form. The case will then be distributed to the specific advisory board for discussion on a secured forum. All expert opinions and known literature are gathered and the board composes a letter of recommendation including rationale and relevant references. This advice is sent back to the requesting physician within 4–7 days of submission of the request. Six months after the request is submitted, the requesting physician is asked for follow-up information on the case.

Results Up to May 2023, the ABCIP discussed 167 cases from physicians in 31 different countries regarding cancer during pregnancy, postpartum cancer diagnosis, or questions regarding women with a history of cancer and a desire to become pregnant (see figure 1). Follow-up information was collected on 24 cases.

Conclusion The ABCIP provides easily accessible, free advice to physicians with questions about their pregnant cancer patients or cancer patients who wish to become pregnant in the future. We show that the ABCIP is frequently consulted and that its recommendations are used in daily practice by most of the physicians who use the ABCIP.

Disclosures All authors declare no conflicts of interest.
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, 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 None

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

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 a 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 cesarean 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 re-consideration with a robot assisted systemic pelvic lymphadenectomy with histologically negative lymph nodes. The procedure was associated with minimal blood loss and no intra- or post-operative 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 therapeutic 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

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