Conclusion* Evaluation of endometrium in patients with increasing post menopausal age, hypertension and intermenstrual bleeding before performing hysterectomy for patients with myoma uteri associated bleeding is a must to avoid inadequate surgical treatment

Fertility pregnancy

60 COMPREHENSIVE GENOME-WIDE ANALYSIS OF NON-INVASIVE TEST DATA ALLOWS ACCURATE CANCER PREDICTION: A RETROSPECTIVE ANALYSIS OF OVER 85.000 PREGNANCIES

[1]L Lenaerts*, [2]N Brison, [1]C Maggen, [2]L Vancoillie, [3]H Che, [4]P Vandenberghe, [4]D Dierickx, [2]L Michaux, [2]B Dewaele, [5]P Neven, [6]G Floris, [3]T Jatsenko, [5]K Van Calsteren, [7]V Vandecaveye, [8]L Dehaspe, [2]K Devriendt, [2]E Legius, [2]K Van Den Bogaert, [3]J Vermeesch, [1]F Amant. *[1]Catholic University Leuven, Oncology, Belgium; [2]University Hospitals Leuven, Center for Human Genetics, Belgium; [3]Catholic University Leuven, Human Genetics, Belgium; [4]University Hospitals Leuven, Hematology, Belgium; [5]University Hospitals Leuven, Gynaecology and Obstetrics; [6]University Hospitals Leuven, Pathology, Belgium; [7]University Hospitals Leuven, Radiology, Belgium; [8]Catholic University Leuven, Genomics Core facility, Belgium*

10.1136/ijgc-2021-ESGO.235

Introduction/Background* Implausible false positive results in non-invasive prenatal testing (NIPT) have been occasionally associated with the detection of occult maternal malignancies. Hence, there is a need for approaches allowing accurate prediction of whether the NIPT result is pointing to an underlying malignancy, as well as for organized programs ensuring efficient downstream clinical management of these cases.

Methodology Using a large data set of 88,294 NIPT performed in our University Hospital Leuven, we retrospectively evaluated the positive predictive value (PPV) of our NIPT approach for cancer detection. In this approach, whole-genome cell-free DNA (cfDNA) data from NIPT were scrutinized for the presence of (sub)chromosomal copy number alterations (CNAs) predictive for a malignancy, using an unbiased NIPT analysis pipeline coined GIPSeq. For suspected cases, the presence of a maternal cancer was evaluated via subsequent multidisciplinary clinical follow-up examinations. The cancer-specificity of the identified CNAs in cfDNA was assessed through genetic analyses of a tumour biopsy.

Result(s)* Fifteen women without a cancer history were identified with a GIPSeq result suggestive of a malignant process. Their cfDNA profiles showed either genome-wide aberrations or a single trisomy 8. Upon clinical examinations, a solid or hematological cancer was identified in 4 and 7 cases, respectively. Three women were identified as having a clonal mosaicism. For one case no underlying condition was found. These numbers add to a PPV of 73%. Based on this experience, a novel multidisciplinary care path for efficient clinical management of these cases was presented.

Conclusion* The here presented approach for analysing NIPT results has an unparalleled high PPV, yet unknown sensitivity, for detecting asymptomatic malignancies upon routine NIPT. Given the complexity of diagnosing a pregnant woman with cancer, clinical follow-up should occur in a well-designed multidisciplinary setting, such as via the novel care model that we presented here.

These findings have now been accepted for publication in eClinicalMedicine (online journal of The Lancet group), showing the importance of these data.

94 FERTILITY-SPARING TREATMENT IN SEROUS BORDERLINE OVARIAN TUMORSWITH EXTRA-OVARIAN INVASIVE IMPLANTS. AN ANALYSIS FROM THE MITO14 STUDY DATABASE

[1]F Falcone*, [2]M Malzoni, [3]G Cormio, [4]AM Perrone, [5]MG Ferrandina, [6]L Frigerio, [7]VDI Donato, [8]F Raspagliesi, [9]N Losito, [1]S Greggi. *[1]Istituto Nazionale Tumori, IRCSS, 'Fondazione G. Pascale', Department of Gynecologic Oncology, Naples, Italy; [2]Center for Advanced Endoscopic Gynecologic Surgery, Endoscopica Malzoni, Avellino, Italy; [3]University of Bari 'Aldo Moro', Department of Biomedical Sciences and Human Oncology, Unit of Obstetrics and Gynecology, Bari, Italy; [4]IRCCS Azienda Ospedaliero-Universitaria di Bologna, Division of Oncologic Gynecology, Bologna, Italy; [5]Fondazione Policlinico Universitario A. Gemelli, IRCCS, Department of Woman and Child Health and Public Health, Rome, Italy; [6]ASST Papa Giovanni XXIII, Bergamo, Obstetrics and Gynecology Department, Bergamo, Italy; [7]Umberto I, 'Sapienza' University of Rome, Department of Maternal and Child Health and Urological Sciences, Rome, Italy; [8]Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Gynecologic Oncology, Milan, Italy; [9]Istituto Nazionale Tumori, IRCSS, 'Fondazione G. Pascale', Surgical Pathology Unit, Naples, Italy*

10.1136/ijgc-2021-ESGO.236

Introduction/Background* Only 10–15% of serous borderline ovarian tumors (SBOT) have extra-ovarian invasive implants, and conservative treatments have been rarely reported. The MITO14 is a multi-institutional retrospective study conducted

Abstract 94 Table 1 Patient, tumor, and treatment related characteristics

Case#	Age (yr)	BMI (kg/m2)	Previous pregnancy	Preoperative serum CA125 levels (U/mL)	Bilateral ovarian involvement	Peritoneal cancer index (no.)	Surgical approach	Completeness of cytoreduction, (score)*	Surgical management of ovarian lesion(s)	FIGO stage	Adjuvant chemotherapy after surgery
1	34	22.7	-	406	no	5	open	0	U SO	IIIB	no
2	36	23.2	1 NFTD	210	yes	6	laparoscopy	0	SO + contralateral Cys	IIIB	no
3	19	27.8	-	381	no	3	laparoscopy	0	U Cys	IIB	no
4	33	25.0	-	100	yes	3	open	1	B Cys	IIB	yes
5	28	20.2	-	180	no	5	open	2	U Cys	IIIB	yes
6	31	26.5	1 NFTD	46	yes	6	laparoscopy	0	B Cys	IIIB	no
7	23	24.1	-	80	no	4	open	0	U SO	IIIB	yes
8	26	15.7	-	2616	yes	12	open	2	SO + contralateral Cys	IIIB	yes
9	33	20.4	1 NFTD	60	no	8	open	0	U SO	IIIB	no
10	27	22.4	-	289	no	4	open	0	U SO	IIIB	yes
11	43	21.5	-	41	no	4	open	0	U SO	IIIB	no
12	36	26.3	-	957	yes	2	open	0	SO + contralateral Cys	IIB	no
13	30	22.3	1 SFTM	889	yes	10	open	1	SO + contralateral Cys	IIIB	yes

B, bilateral; Cys, cystectomy; NFTD, normal full-term delivery; SFTM, spontaneous first-trimester miscarriage; SO, salpingo-oophorectomy; U, unilateral.
*categorized as proposed by Sugarbaker: 0 =no visible residual tumor; 1 =residual nodules ≤0.25 cm; 2 =residual nodules between 0.26 and 2.5 cm; 3 =residual nodules >2.5 cm.

Abstract 94 Table 2 Oncologic and reproductive outcomes

Case#	1st relapse (mo)	Treatment of 1st relapse	2nd relapse (mo)	Treatment of 2nd relapse	Attempting to conceive	Pregnancy	Follow-up (mo)	Current status
1	-	-	-	-	-	-	136	NED
2	14	Non conservative	-	-	-	-	33	NED
3	43	Still conservative	-	-	-	-	174	NED
4	17	Still conservative	-	-	yes	2 NFTD	158	NED
5	17	Still conservative	9	Still conservative	yes	-	144	NED
6	24	Still conservative	23	Still conservative	yes	1 NFTD	113	NED
7	16	Still conservative	35	Still conservative	yes	-	134	NED
8	190	Non conservative	-	-	-	-	217	NED
9	8	Non conservative	-	-	yes	1 SFTM	23	AWD
10	142	Still conservative	-	-	-	-	146	NED
11	-	-	-	-	-	-	96	NED
12	4	Still conservative	-	-	-	-	145	NED
13	69	Non conservative	32	Non conservative	-	-	207	NED

AWD, alive with disease; NED, no evidence of disease; NFTD, normal full-term delivery; SFTM, spontaneous first-trimester miscarriage.

with the aim of systematically collecting data from consecutive BOT patients. The present analysis reports the oncological and reproductive outcomes of women with SBOT and invasive implants registered into the MITO14 database and conservatively treated between January 1995 and December 2019

Methodology Thirteen patients ($FIGO_{2014}$ stage II-III SBOT with invasive implants) were recruited (table 1). Primary and secondary endpoints were, respectively, recurrence, pregnancy and live birth rates. Only patients undergoing fertility-sparing surgery (FSS) were included, while patients were excluded in case of: age >45 years; presence of second tumor(s) requiring therapy interfering with the treatment of BOT.

Result(s)* Median follow-up from primary cytoreduction was 144 months (range 23–217). Eleven patients (84.6%) experienced at least one recurrence (median time to first relapse 17 months, range 4–190), all of these undergoing secondary surgery (FSS in 7). Five patients attempted to conceive (at least one pregnancy in 3; at least one healthy child in 2). At the end of the observation period, 12 patients (92.3%) showed no evidence of disease and 1 (7.7%) was alive with disease (table 2).

Conclusion* Despite the recurrence high rate, survival and pregnancy outcomes indicate that FSS could be considered in SBOT with invasive implants.

197 ABSTRACT WITHDRAWN

265 LOSS OF OVARIAN FUNCTION IN YOUNG PATIENTS WITH CANCER: PROGNOSTIC MODEL

R Cioffi*, A Bergamini, ML Fais, V Vanni, L Pagliardini, G Mangili, E Papaleo, M Candiani.
San Raffaele Hospital, Obstetrics and Gynecology, Milan, Italy

10.1136/ijgc-2021-ESGO.237

Introduction/Background* Chemotherapy negatively affects ovarian function and fertility. At present, clinical assessment does not allow an accurate prediction of ongoing ovarian function after cancer or future ability to conceive. This study aims to develop a predictive model for premature ovarian failure (POF) after chemotherapy analyzing the outcomes of a cohort of young women with different types of cancer in terms of menstrual function recovery and fertility.

Methodology Retrospective, monocentric cohort study including 348 patients referring to Oncofertility Unit of San Raffaele Hospital (Milan, Italy) from August 2011 to January 2020. POF was defined as absence of menstrual cycles for at least 12 months before the time of study. Infertility was defined as failure to achieve a spontaneous pregnancy after regular unprotected intercourse for at least 12 months. Prognostic factors associated with POF were identified using ANOVA, χ-square test and univariate binary logistic regression. A multivariate logistic regression analysis using forward conditional mode was performed to create a predictive model by selecting the best combination of prognostic factors. A ROC curve was constructed, with measurement of area under the curve (AUC) and corresponding 95% confidence intervals.

Result(s)* At follow-up, a total of 227 patients were alive without disease. Data about menstrual function resumption was available for 184 patients. Forty-five patients (25%) experienced POF after cancer treatment. A total of 60 patients (33%) were infertile. Factors and chemotherapy schemes associated with a higher prevalence of POF are reported in table 1 and table 2, respectively. The best predictive model for POF could be identified by the combination of the following factors: age; number of chemotherapy lines; vincristine, adriamycin and ifosphamide/adriamycin and ifosphamide (VAI/AI), capecitabine and adriamycin, bleomycine, vinblastine and doxorubicin (ABVD) (AUC=0.906, CI 95% 0.858 – 0.954, p=0.0001).

Conclusion* The model we constructed predicts with good accuracy the individual probability of loss of ovarian function

Abstract 265 Table 1 Factors associated with a higher prevalence of premature ovarian failure (POF). AMH: anti-mullerian hormone; AFC: antral follicle count; FSH: follicle-stimulating hormone. Data are expressed as mean ± standard deviation

	POF	No POF	p-value
Age	31.0 ± 6.0	30.1 ± 6.5	ns
BMI	21.0 ± 2.3	21.4 ± 3.1	ns
AMH	1.2 ± 1.1	2.2 ± 1.8	0.03
AFC	10.3 ± 6.4	12.2 ± 6.7	ns
FSH	10.2 ± 7.1	7.4 ± 3.0	0.01