A01. Correlation of hormonal parameters with endometrial thickness in women with Polycystic Ovary Syndrome

[1]Kamil Derbisz, [1]Rafał Baran, [1,2]Robert Jach, [1,2]Iwona Gawron*

[1]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology

[2]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow

*iwona.gawron@uj.edu.pl

Introduction and purpose: The endometrium in women with polycystic ovary syndrome (PCOS) shows structural and functional disorders (DOI:10.1093/humupd/dmaa051), resulting from anovulation, hormonal and metabolic disorders and inflammation, leading to an increased risk of endometrial hyperplasia and cancer, and poorer obstetric outcomes (DOI: 10.3389/fendo.2021.766601). As the relationship of PCOS with impaired endometrial function is not fully understood and requires studies at the molecular level (DOI:10.3389/fphys.2021.788772), a study was planned to assess the relationship of selected hormonal parameters with endometrial thickness, the most useful endometrial parameter for clinical evaluation.

Material and methods: A retrospective cohort study (Consent no. 215/KBL/OIL/2021) among women diagnosed with PCOS was conducted. The diagnosis was based on Rotterdam criteria (DOI: 10.1016/j.fertnstert.2003.10.004). The results of laboratory hormonal tests, as well as the results of imaging tests, including imaging of the endometrium, were assessed. Diagnostics was performed in the early follicular phase or regardless of the phase in anovulatory cycles. Venous blood samples were collected in the morning after 8-hour fast. Blood samples were analyzed with Cobas PRO/e801 and Cobas 8000 analyzers (Roche Diagnostics, Basel, Switzerland). Ultrasound examination of the reproductive organ was performed with the Samsung WS80A machine (Samsung Electronics, Suwon, Korea) with vaginal/ transabdominal transducer. Standard statistical tests and STATSoft Statistica v.13.3 were used to analyze selected variables.

Results: 367 women aged 16-44 years diagnosed with PCOS were included in the study. Mean values of age, BMI, cycle day, and endometrial thickness were: 24.28 (SD=4.99) years, 25.47 (SD=6.61) kg/m2, 65.53 (SD=133.97) days, and 6.91 (SD=2.95) mm, respectively. In the subpopulation of women with increased total testosterone concentration (>1.67 nmol/L) and in the subpopulation with subclinical hypothyroidism (TSH>2.5 uIU/mL and normal levels of thyroid hormones) and positive anti-thyroid peroxidase and/or anti- thyroglobulin antibodies the endometrium was thinner compared to the rest of the group (6.6 mm vs. 7.3 mm, p = 0.03 for hyperandrogenemia; 5.4 vs. 6.9 mm, p = 0.04 for autoimmune thyroiditis). In the subpopulation with the ratio of luteinizing hormone (LH)/follicle-stimulating hormone (FSH)> 2, the endometrium was thicker than in the rest of the group (7.2 mm vs. 6.3 mm, p = 0.01). There was a negative correlation between the endometrial thickness value and the values of total serum testosterone (R= -0.15, p = 0.03) and FSH (R = -0.42, p <0.001) and a positive correlation for the LH/FSH ratio (R=0.16, p = 0.003) and estradiol (R=0.36, p <0.001). No correlation was found between the PCOS phenotype and endometrial thickness.

Conclusions: Of all hormonal disturbances, hyperandrogenism, expressed as increased total serum testosterone, and autoimmune thyroiditis were associated with a thinner endometrium. The usefulness of this findings in the oncological surveillance of the endometrium or in the diagnostics and preparation of the endometrium during the treatment of infertility requires further research.

A02. Is testing for chronic endometritis in idiopathic infertility justified?

[1,2]Iwona Gawron*, [1,2]Andrzej Zmaczyński, [2]Rafał Baran, [2]Kamil Derbisz, [3]Łukasz Chmura, [3]Piotr Sadowski, [1,2]Robert Jach

[1]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[2]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[3] Jagiellonian University Medical College, Department of Pathomorphology, Krakow
*iwona.gawron@uj.edu.pl

Introduction and purpose: The relationship between chronic endometritis (CE) and subfertility has emerged as an area of new research. CE, defined as the presence of atypical plasmocyte infiltrates in the endometrial stroma, is usually asymptomatic or associated with mild nonspecific symptoms, such as pelvic pain, abnormal uterine bleeding (AUB) and vaginal discharge. It is assumed that CE may reduce endometrial receptivity, impair decidualization and increase uterine contractility, thereby contributing to recurrent implantation failure and miscarriage. Some cases of idiopathic infertility are presumed to be related to CE. The aim was to determine a cut-off point for the number of CE-defining plasmocytes and to evaluate the prevalence of CE in women of reproductive age undergoing office hysteroscopy for intrauterine pathology, idiopathic infertility, AUB and symptomatic cesarean scar defect (CSD).
Material and methods: A prospective cohort study (consent number 1072.6120.322.2020) included women who underwent office hysteroscopy, preceded by standard gynecological pre-operative assessment. Office hysteroscopy was performed with Karl Storz 5.0 mm Bettocchi® operative sheath with 2.9 mm 30^{o} telescope with 5Fr working channel, without general anesthesia. Grasping forceps, blunt scissors and bipolar needle electrode were used to treat uterine pathology. Sodium Chloride 0.9% solution was used as the medium. The extracted tissue material was subjected to standard histopathological examination. Additional immunohistochemical staining with Monoclonal Mouse Anti-Human CD138 antibodies was used to detect plasmocytes. The cut-off point for the number of CE-defining plasmocytes was determined by the Receiver Operating Characteristic (ROC) curve. Standard statistical methods and the STATSoft Statistica v.13.3 package were used to analyze specified variables.
Results: The study included 240 women aged 18-44 years. The procedure was performed for the following indications: infertility (138/240 women; 57.5%), AUB (135/240 women; 56.3%), uterine polyp (127/240 women; 52.9%), polypoid endometrium (27/240 women; 11.3%), CSD (26/240 women; 10.8%), in various combinations. Plasmocyte concentration was given as the number of plasmocytes/ high power field (HPF). The relationship between the number of plasmocytes and the presence of histological CE markers was calculated using the Spearman's rank correlation confirming the existence of the weak correlation (R=0.34; p <0.01). The optimal cut-off point for the number of CE-defining plasmocytes was determined by means of the ROC curve as 2 plasmocytes/ HPF (Youden Index 0.37; AUC=0.7; 95% CI for AUC of ROC = 0.64-0.77; p=0), with high sensitivity and average specificity. The mean value of plasmocytes/ 1HPF for a treated condition vs. for the group of other indications was: 6.33 vs. 8.68 (p=0.25) for infertility, 8.3 vs. 6.04 (p=0.26) for AUB, 9.01 vs. 5.44 (p=0.08) for uterine polyp, 4.8 vs. 7.6 (p=0.38) for polypoid endometrium, 11.26 vs. 6.8 (p=0.18) for CSD.
Conclusions: There was no evidence of higher CE intensity in women with idiopathic infertility compared to other gynecological pathologies. The diagnostics of CE in asymptomatic infertile women without intrauterine pathology, does not seem to be justified. Perhaps an individual benefit can be achieved, but the target group remains to be defined.

A03. Is pelvic endometriosis associated with chronic endometritis?

[1,2]Iwona Gawron*, [1,2]Andrzej Zmaczyński, [3]Łukasz Chmura, [3]Piotr Sadowski, [2]Rafał Baran, [2]Kamil Derbisz, [2,4]Dominika Trojnarska, [1,2]Robert Jach

[1]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[2]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[3] Jagiellonian University Medical College, Department of Pathomorphology, Krakow
[4]Jagiellonian University Medical College, Institute of Nursing and Midwifery, Laboratory of Fundamentals of Maternity Care, Krakow
*iwona.gawron@uj.edu.pl

Introduction and purpose: Pelvic endometriosis is a complex estrogen-dependent inflammatory syndrome of unknown etiology, altering the microenvironment of the peritoneal cavity and adversely affecting physiological processes related to fertilization. The function of endometrial cells appears to be pathological not only in endometriotic foci but also in eutopic endometrium. One of the factors that may impair endometrial receptivity in the course of endometriosis is chronic endometritis (CE). It is not yet known whether CE is one of the complications of endometriosis or an element of its pathogenesis. Additional endometrial diagnostics is not obligatory, but it could potentially bring additional benefits and contribute to the improvement of obstetric outcomes. The objective is to analyze a potential correlation between pelvic endometriosis and CE.
Material and methods: A prospective cohort study (consent no. 1072.6120.76.2021) included women subjected to surgical treatment of endometriosis by laparoscopy due to infertility or pain. Endometriosis was confirmed by histopathological examination of the excised lesion and the stage of the disease was determined according to revised American Society for Reproductive Medicine classification (DOI: 10.1016/s0015-0282(97)81391-x). Endometrial sampling was performed for CE diagnostics. CE was defined as the presence of > 1 plasmocyte in the endometrial stroma/ 1 high power field (HPF) and additional immunohistochemical staining with Monoclonal Mouse Anti-Human CD138 antibodies was used to detect these cells. Standard statistical methods and the STATSoft Statistica v.13.3 package were used to analyze the studied variables.
Results: The study included 44 women aged 18-44 years. Laparoscopy was performed due to: infertility and pain in 10 (22.7%), infertility in 5 (11.4%), and pain in 29 (65.9%) women. Endometriosis of the 1st degree was confirmed in 4 (9.1%), of 2nd – in 2 (4.5%), of 3rd - in 30 (68.2%), and of 4th - in 8 (18.2%) women. CE was confirmed in 13 women (29.6%), in 10 (22.7%) 1 plasmocyte/ 1 HPF was found, and in 21 (47.7%) no plasmocytes were found in the tested material. Using the Student's t-test, the mean value of plasmocytes/ 1HPF in the group of women with infertility and pain only were compared to the rest of the population, and the results were 4.1 vs. 2.1 ($p = 0.28$) and 3.2 vs. 1.8 ($p = 0.44$), respectively. Pearson correlation coefficient of the stage of endometriosis and the intensity of CE, expressed as the number of plasmocytes/ 1 HPF was 0.04 ($R = 0.04$; $p = 0.75$), showing no correlation between the stage of endometriosis and CE activity.
Conclusions: There was no correlation between the severity of endometriosis and CE in the small-sized study population. The indications for endometrial diagnostics, as a potential cause of infertility, have not been confirmed. The hypothetical link between the two inflammatory states requires further research in an appropriately large female population.

A04. The role of office-hysteroscopy in the diagnostics of submucosal adenomyosis.

[1]Rafał Baran*, [1,2]Andrzej Zmaczyński, [3]Piotr Sadowski, [1,2]Iwona Gawron

[1]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[2]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[3]Jagiellonian University Medical College, Department of Pathomorphology, Krakow
*baran.rafal@me.com

Introduction: Adenomyosis is defined as an invasion of the myometrium by endometrial glands and stroma. There is no unified disease classification system. A special type of adenomyosis is submucosal adenomyosis (SA), which may contribute to poorer endometrial receptivity, higher rate of miscarriages and abnormal uterine bleeding. The influence of adenomyosis subtypes on pain, bleeding pattern and fertility is difficult to assess (DOI: 10.1016/j.fertnstert.2018.01.006), also due to the high frequency of comorbid pathologies. Traditionally, the diagnosis was made upon hysterectomy, but it does not apply to women of childbearing age. Interestingly, few reports have described hysteroscopic diagnosis of adenomyosis by biopsy. Hysteroscopic diagnosis would enable appropriate treatment. The aim was to analyze the symptoms, indications and pathological results in women clinically diagnosed with adenomyosis during hysteroscopy.
Materials and methods: A prospective cohort study (consent no. 1072.6120.322.2020) was conducted among women subjected to office-hysteroscopy due to suspected uterine pathology. A rigid 2.9 mm Karl Storz Bettocchi® hysteroscope in a 5 mm outer sheath with a viewing angle of 30^{o} and a 5Fr working channel was used after prior confirmation of the indications for surgery and administration of pain-relieving drugs. Saline solution was used as the medium. The hysteroscopic diagnosis of SA was based on the visualization of: blackish/ dark-bluish or dark-red/ brown hemorrhagic cystic lesions and focal or diffuse mucosal hyperemia/ hypervascularization (DOI: 10.1155/2017/2518396) (Pic.1-4). Foci of SA were removed using grasping forceps and sent for pathological examination. Standard histopathology was performed. Collected data were compiled using Microsoft® Excel spreadsheet.
Results: 14 women aged 29-42 were diagnosed with SA based on hysteroscopic visual evaluation. Indications for the uterine cavity diagnostics were: secondary infertility in 9 (64.3%), uterine polyp in 4 (28.6%) and primary infertility in 1 (7.1%) woman. The most common symptoms were: abnormal uterine bleeding, in 6 (42.9%) and pelvic pain, in 3 (21.4%) women. Hysteroscopically visualized lesions associated with SA included: polyps (4/13, 30.8%), polyposis (3/13, 23.1%), micropolyps (23.1%), focal hyperemia (2/13, 15.4%), diffuse hyperemia (“strawberry” endometrium) (1/13, 7.7%) and intrauterine adhesions (1/13, 7.7%). All histopathological findings were oncologically unsuspected. No histopathological report confirmed the diagnosis of SA. Chronic endometritis based on immunohistochemical staining for CD138 antigen was confirmed only in 3 cases of endometrial polyp.
Conclusions: Endometrial sampling is not appropriate for the diagnostics of SA, thus a hysteroscopic clinical evaluation of the uterine cavity is necessary. An endomyometrial layer biopsy is required to confirm SA, however, uterine traumatization in women of reproductive age is avoided. The compatibility of pathological-clinical diagnoses requires further research.

A05. Combined pharmacological and surgical treatment of cesarean scar pregnancy in one vs. in two hospital stays: a single center experience in a series of cases.

[1,2]Iwona Gawron*, [1,2]Andrzej Zmaczyński, [1]Rafał Baran, [1]Kamil Derbisz, [1]Jan Wolski, [1,2]Robert Jach

[1]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[2]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
*iwona.gawron@uj.edu.pl

Introduction and purpose: There is no standard of care for cesarean scar pregnancy (CSP) as the limited number of cases limits the extrapolation of results. Our center successfully uses two-step treatment with methotrexate and subsequent hysteroscopic evacuation of CSP during two separate hospitalizations. The time in between is assumed to be needed to lose the trophoblast's vital potential and reduce the vascularization of the lesion, which increases the safety of hysteroscopy, but at the same time it delays the disposal of the lesion and exposes the patient to another hospitalization. The benefit of double hospitalization has not yet been demonstrated. The aim of the study was to compare blood loss on hysteroscopy performed during separate hospitalization to hysteroscopy performed during hospitalization for MTX administration.
Material and methods: A prospective cohort study (consent no. 1072.6120.321.2020) was conducted based on a case series of women diagnosed with CSP. Women with decreasing B-human Chorionic Gonadotropin (B-hCG) levels were excluded. All women were given a single dose of 100 mg methotrexate (MTX) intravenously; women with visible embryonic features were given an additional 50 mg MTX in intra-amniotic injection, along with 2 ml 15% potassium chloride (KCl) in case of present fetal heartbeat (FH). B-hCG concentration was measured on day 4 and 7. After obtaining satisfactory decrease in B-hCG and the loss of lesion vascularity, all patients underwent hysteroscopic evacuation of CSP remnants by means of a “cold” loop. Standard statistical methods and the STATSoft Statistica v.13.3 were used to analyze the studied variables.
Results: The study included 21 women aged 27-42, with a gestational age of 6-12 weeks. FH was present in 11 women (52.4%). All women were administered MTX intravenously, 13 (61.9%) were given an additional dose of MTX in intra-amniotic injection, along with KCl in 11 (52.4%) cases in order to stop FH. The time interval between MTX administration and hysteroscopy was 5-105 days and the mean was 27 days. Pearson's correlation coefficient for the association between the number of days between MTX administration and hysteroscopy and the value of decrease in hemoglobin (Hb) concentration from the baseline concentration after surgery was -0.18 ($R = -0.18$, $p = 0.43$). The mean decrease in Hb concentration after hysteroscopy in the group with initial positive FH and no FH was 2.14 g/dL and 1.1 g/dL ($p = 0.13$), respectively. The trend was shown that the shorter the interval between MTX administration and hysteroscopy, the greater the blood loss, and that the presence of FH was associated with greater blood loss. However, statistical significance was not achieved, probably because the sample size was too small.
Conclusions: Extending the time interval until hysteroscopy causes the patient to stay with the lesion longer and requires re-hospitalization, but it probably allows to avoid potential excessive blood loss. The observed trend needs to be verified in a study with a larger population of women.

A06. Wyniki położnicze u kobiet po plastyce niszy w bliźnie po wcześniejszym cięciu cesarskim.

Magdalena Piróg[1], Anna Pulka[1], Olga Kacalska-Janssen[1], Andrzej Zmaczyński[1], Robert Jach[1]

[1]Klinika Endokrynologii Ginekologicznej i Ginekologii, Szpital Uniwersytecki w Krakowie, Collegium Medicum Uniwersytetu Jagiellońskiego

Wstęp i cel: Nisza w bliźnie po cięciu cesarskim (CC) oceniana jest ultrasonograficznie jako trójkątny hipoechogeniczny obszar w rzucie blizny po histerotomii. Defekt tej blizny staje się istotnym problemem z uwagi na wzrost częstości CC i zwiększa ryzyko wystąpienia: ciąży w bliźnie po CC, zespołu łożyska wrośniętego, łożyska przodujące czy pęknięcia macicy. Ponadto obecność niszy wiąże się wystąpieniem takich objawów jak: nieprawidłowe krwawienie z dróg rodnych, ból podbrzusza czy niepłodność. Aktualnie brak jest rekomendacji określających wskazania do opracowania niszy w bliźnie po CC jak również oceniających skuteczność takiego zabiegu. Celem tej pracy była ocena wyników położniczych u pacjentek po plastyce niszy w bliźnie po CC, u których wskazaniem do wykonania tego zabiegu była niepłodność wtórna.

Materiały i metody: 163 pacjentki Kliniki Endokrynologii Ginekologicznej i Ginekologii po plastyce niszy w bliźnie po CC, przeprowadzonych między 11.2017 a 06.2021 r. Z tej grupy wyłoniono pacjentki z niepłodnością wtórną, u których potwierdzono obecność niszy w bliźnie po CC w oparciu o obraz usg TV, oceniono jej wielkość, a także wykluczono inne przyczyny niepłodności wtórnej, w tym czynnik męski. Opracowanie blizny po CC wykonano drogą laparotomii vel. laparoskopii wraz z histeroskopią. Po minimum 6-miesięcznym okresie od zabiegu stosowania skutecznej antykoncepcji pacjentki rozpoczęły starania o ciążę.

Wyniki: Wśród 22 pacjentek ze wskazaniem do zabiegu z uwagi na niepłodność wtórną u 15 plastyka niszy wykonana była drogą laparotomii, natomiast u 7 drogą laparoskopii wraz z histeroskopią. Średni wiek pacjentek wynosił 32.5±4.7 lat, a BMI 21.7±2.6 kg/m^2. Przed plastyką niszy pacjentki były po dwóch (n=9) lub jednym (n=13) CC. CC elektywne wykonano u 8 pacjentek, natomiast u 14 wskazaniami były: zagrażającą wewnątrzmaciczną zamartwica u płodu (n=6) i brak postępu porodu (n=8). Po opracowaniu niszy 86,4% pacjentek zaszło spontanicznie w ciążę (n=19). U jednej pacjentki doszło do poronienia 6/7 t.c, przebieg pozostałych ciąż był niepowikłany. Wszystkie ciąże rozwiązano drogą CC po ukończonym 39 t.c.

Wnioski: Nisza w bliźnie po CC jest istotnym czynnikiem niepłodności wtórnej. Przeprowadzenie plastyki niszy drogą laparoskopii vel laparotomii pozwala na uzyskanie ciąży oraz nie wpływa na ryzyko wystąpienia powikłań położniczych takich jak ciąża w bliźnie po CC, zespół łożyska wrośniętego, łożysko przodujące czy pęknięcie macicy.

A07. Case series of three nulliparous women with endometrial cancer managed in the oncofertility program.

Magdalena Massalska-Wolska*[1], Jan Wolski[1], Iwona Gawron[1,2], Andrzej Zmaczyński[1,2], Karolina Jakubiec-Wiśniewska[3,4], Robert Jach[1,2]

[1]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology, [2]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow, [3]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Obstetrics and Perinatology, [4]University Hospital in Krakow, Clinical Department of Obstetrics and Perinatology, *magdalena.massalska-wolska@uj.edu.pl

Introduction: Endometrial cancer (EC) is the most common malignant neoplasm of the female genital tract in developed countries. EC is most common in postmenopausal women, but approximately 25% of cases are in premenopausal women and 3-5% are <40 years of age. Most women are diagnosed at FIGO I stage by the early appearance of abnormal uterine bleeding or abnormal pap smear, where the 5-year survival rate is >90% [1]. Standard treatment consists of a simple hysterectomy with bilateral salpingo-oophorectomy. Unfortunately, radical surgical treatment prevents pregnancy in the future. Fertility-sparing therapy can be introduced to women with FIGO IA EC without myometrial invasion. The aim of this overview is to present three individuals with different outcomes of fertility-sparing treatment.

Materials and methods: The series included 3 women of reproductive age treated in the years 2018-2022 for the preoperative diagnosis of a uterine polyp, associated with infertility, heavy menstrual bleeding (HMB) or otherwise asymptomatic. Diagnostics were performed by means of office-hysteroscopy (Karl Storz 5.0 mm Bettocchi® operative sheath, 2.9 mm 30º telescope, 5Fr working channel), operative hysteroscopy (Karl Storz 10 mm resectoscope) and dilation and curettage (D&C). Pathological examination of the tissue material from the primary surgery confirmed atypical endometrial hyperplasia (AEH) and/or EC. Medroxyprogesterone acetate (MPA) in the oral and/or depot form and the levonorgestrel-releasing intrauterine system (LNG-IUS) were used in the treatment. Control endometrial (EB) biopsies were performed at 3-6 months intervals. All women were offered in vitro fertilization (IVF).

Results: Patient No. 1, aged 35, G0P0, was diagnosed with AEH on hysterolaparoscopy performed due to infertility. In 2019- 2022 she was treated with MPA (oral and depot) and LNG-IUS, undergoing a 5-time EB indicating a progression to G1 endometroid carcinoma, performing IVF in the meantime and obtaining blastocysts subjected to the freeze-all strategy. The patient is currently awaiting the decision of the oncological council. Patient No. 2, aged 36, G0P0, was diagnosed with adenocarcinoma of ambiguous origin, more indicative of the endometrium than the cervix, in office and subsequent operative hysteroscopy, performed due to infertility. In 2019-2021 the patient was treated with MPA (depot). In the meantime, she underwent cervical conization with LSIL confirmation and 2 IVF programs, obtaining blastocysts subjected to freeze-all strategy. Hysteroscopic EB has shown complete EC regression. The patient is currently treated due to "thin endometrium" before planned thawed-embryo transfer. Patient No. 3, aged 31, G3P0, currently at 35 weeks of pregnancy, was diagnosed with endometrioid carcinoma G2 on D&C. The patient was treated with MPA (oral). In 2018-2020, she underwent 6 more D&C due to HMB and miscarriage. No EC was found in any D&C material. The patient was referred to IVF, but got pregnant spontaneously.

Conclusions: Pharmacological treatment of EC is not optimal, but is an important option for women in whom EC may be the cause of infertility. All three women experienced different treatment outcomes and sequelae. There are no diagnostic tools allowing the selection of optimal pharmacotherapy and the prediction of treatment results.

1. American College of Obstetricians and Gynecologists. ACOG practice bulletin, clinical management guidelines for obstetrician-gynecologists, number 65, August 2005: management of endometrial cancer. Obstet Gynecol 2005; 106:413.

A08. The state of health and the quality of life in women suffering from endometriosis

Monika Ruszała[1], Dominik Dłuski[1], Izabela Winkler[2], Jan Kotarski[3], Tomasz Rechberger[4], Marek Gogacz[5]

[1]Chair and Department of Obstetrics and Perinatology, Medical University of Lublin, 20-090 Lublin, Poland
[2]2nd Department of Gynecology, St John's Center Oncology, 20-090 Lublin, Poland
[3] I Chair and Department of Oncological Gynaecology and Gynaecology, Medical University of Lublin, 20-081 Lublin, Poland
[4]2nd Chair and Department of Gynecology, Medical University of Lublin, 20-954 Lublin, Poland

Wstęp i cel: The quality of life is related to good health, family relations, feeling of self-esteem, ability to cope with difficult situations. Endometriosis is a chronic condition which affects different areas of life. The lack of satisfaction in everyday life is mainly due to constant pain. The process of adjusting to a life with illness is associated with negative emotions. The disease can take away the ability to be physically active, get an education, work continuously, interact with friends. The aim of the study is to review the current state of knowledge concerning the impact of social and medical factors on a women's population affected by endometriosis.

Materiał i metody: The review and analysis of medical literature published in 2017-2022 was performed using information from the PubMed database. The study based on the following issues: the quality of life in women suffering from endometriosis, understanding the results of chronic disease by family members and partners, reproductive health and endometriosis.

Wyniki: Endometriosis affects almost every third woman at the reproductive age, especially between 25 and 29 years of age. Only 22,8% of them are asymptomatic. It has been reported that almost every second woman with endometriosis cannot be a parent, which is indisputable one of the basic needs in human life. The phenomenon varies between 3.5% and 16.7% depending on the region of the world, women's age and comorbidities. Women who suffer from endometriosis become pregnant later than unaffected onces, which may be associated with a higher risk of perinatal complications. Over time and severity of the disease, women manifest more frequent fatigue in daily life, somatization and stress. Due to 75.9% of women who report taking OTC, variety of pain sensations that do not correlate with the severity of the disease, the use of other nonconventional ways to alleviate the symptoms, such as psychotherapy, a healthy diet, physical activity, herbal therapies and others, are recommended.

Wnioski: A multi-disciplinary care, social support and cognitive-behavioral therapy are needed. The attitude of patients towards the disease, acceptance of life with a chronic disease seems important. A better comprehension of all bio-psycho-social aspects implicated in women's well-being and pain experience on endometriosis needs more research in the near future.

A09. Satysfakcja kobiet z histeroskopii diagnostycznej metodą waginoskopową

[1]Rafał Baran*, [1,2]Iwona Gawron, [1,2]Andrzej Zmaczyński, [1]Piotr Bralewski, [1]Kamil Derbisz, [1,2]Robert Jach

[1]Szpital Uniwersytecki w Krakowie, Oddział Kliniczny Endokrynologii Ginekologicznej i Ginekologii
[2]Uniwersytet Jagielloński Collegium Medicum, Katedra Ginekologii i Położnictwa, Klinika Endokrynologii Ginekologicznej, Kraków
*baran.rafal@me.com

Wstęp i cel: Satysfakcja, czyli ocena własnego doświadczenia pacjenta w systemie opieki zdrowotnej, w światowej medycynie odgrywa istotną rolę od przeszło 30 lat. Pomiar satysfakcji wyodrębnił się jako miernik jakości opieki zdrowotnej wskutek zmiany postrzegania roli klinicystów, jako zapewniających poprawę jakości życia oraz pacjentów, jako konsumentów opieki zdrowotnej oraz włączenia perspektywy pacjenta w proces monitoringu jakości świadczeń i kształtowania polityki zdrowotnej. Biorąc pod uwagę fakt, że doświadczenie pacjenta, oprócz pomocy w ocenie skuteczności małoinwazyjnych technik chirurgicznych, ma kluczowe znaczenie dla ogólnej poprawy jakości usług oraz istotny wpływ na ostateczny wynik leczenia, przeprowadzono ankietowe badanie satysfakcji z histeroskopii diagnostycznej metodą waginoskopową.

Materiał i metody: Przeprowadzono badanie ankietowe (opinia nr 1072.6120.127.2021) wśród pełnoletnich kobiet poddanych histeroskopii diagnostycznej, z zastosowaniem zwalidowanej, anonimowej ankiety. Kwestionariusz został zweryfikowany przez niezależny wielodyscyplinarny zespół. Ankieta obejmowała pismo przewodnie, instrukcję oraz pytania jednokrotnego wyboru, skategoryzowane względem etapów hospitalizacji: i) informacje ogólne, ii) pytania dotyczące kwalifikacji do zabiegu, iii) pytania dotyczące przebiegu zabiegu. Histeroskopię wykonano po uprzednim potwierdzeniu wskazań, dożylnym podaniu 100 mg ketoprofenu oraz miejscowym podaniu 2 ml 1% lidokainy, z zastosowaniem 5 mm płaszcza zewnętrznego Karl Storz Bettocchi® z optyką śr. 2,9 mm o kącie patrzenia 30^{O} i kanałem roboczym 5 Fr. Medium stanowił roztwór soli fizjologicznej. Brak znieczulenia ogólnego zapewniał kontakt z pacjentem, ale narażał na doznania bólowe. Do analizy wybranych zmiennych wykorzystano kompletnie wypełnione ankiety oraz arkusz kalkulacyjny Microsoft® Excel.

Wyniki: W badaniu przeanalizowano rekordy ze 120 ankiet. Kobiety w wieku 31-40 lat stanowiły 57,50% badanych. 99,17% kobiet zadeklarowało możliwość zadawania pytań w procesie kwalifikacji do zabiegu, co u 43,44% pozwoliło na rozwianie wszelkich wątpliwości odnośnie procedury. Stopień klarowności i jakość przekazanych informacji został oceniony na ≥ 8 w 10-punktowej skali przez odpowiednio 88,33% i 78,33% kobiet. U 87,50% kobiet uzyskane informacje pozwoliły zmniejszyć niepokój. 76,67% kobiet oceniło poczucie bezpieczeństwa na ≥ 8/10 punktów. 54,17% kobiet podało fakt przedstawienia przez lekarza alternatywnego postępowania leczniczego. Informowanie przez operatora o kolejno wykonywanych czynnościach podczas zabiegu i możliwym chwilowym zwiększeniu dolegliwości bólowych podano w odpowiednio 95% i 93,33% przypadków. 79,18% kobiet oceniło kwestię poczucia komfortu i bezpieczeństwa w trakcie zabiegu na ≥ 8/10 punktów. 50,83% kobiet podało, że zgłoszenie odczuwaniu bólu wiązało się z przerwaniem wykonywanych czynności przez operatora. 83,33% kobiet oceniło komunikację z operatorem w trakcie zabiegu na ≥ 8/10 punktów. Dolegliwości bólowe w trakcie zabiegu oceniane w 10-stopniowej skali VAS, gdzie 0 to totalny brak dolegliwości bólowych, a 10 najgorszy ból dotąd odczuwany w życiu, miały rozkład normalny ($p=0,007$) (*Ryc. 1*). 93,33% kobiet zadeklarowało akceptację ponownego zabiegu histeroskopii diagnostycznej metodą waginoskopową w razie wystąpienia takiej konieczności.

Wnioski: Wyniki badania ankietowego pokazują, że histeroskopia diagnostyczna metodą waginoskopową jest dobrze tolerowaną procedurą diagnostyczno-leczniczą. Udoskonalenia wymaga efektywna komunikacja w relacji lekarz-pacjent, zwłaszcza na etapie informowania i badania kwalifikującego, mająca kluczowe znaczenie dla satysfakcji z udzielonego świadczenia zdrowotnego.

A10. Conservative management of cervical pregnancy in a woman with recurrent ectopic pregnancy: a case report

[1,2]Andrzej Zmaczyński, [2]Rafał Baran, [2]Kamil Derbisz, [1,2]Robert Jach, [1,2]Iwona Gawron*

[1]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[2]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
*iwona.gawron@uj.edu.pl

Introduction and purpose: Cervical pregnancy (CP) accounts for <1% of ectopic pregnancies (DOI: 10.1002/uog.2602). CP is believed to be associated with the highest risk of complications, including hemorrhage requiring hysterectomy. Due to the rarity of cases and the lack of randomized trials, no treatment standards have yet been established. The management of CP is a diagnostic and therapeutic challenge, especially in the case of previous obstetric failures and a strong desire to preserve fertility. Therefore, the choice of treatment depends on the woman's procreation plans and the experience of the treatment center. The aim is to present an effective combined conservative treatment of cervical pregnancy in a woman with recurrent ectopic pregnancy.
Material and methods: A 40-year-old woman, G5P0, was referred in 6th week of pregnancy due to suspected CP. 28 days earlier she had undergone a thawed embryo transfer (FET) in an in vitro fertilization program (IVF). The embryo was transferred to half the length of the uterine cavity. On admission, she was hemodynamically stable and presented moderate uterine bleeding. Past medical history included: 4 prior pregnancies of extra-uterine location (G1-right tubal pregnancy treated with methotrexate, G2-left tubal pregnancy treated with laparoscopic salpingotomy, G3-right tubal pregnancy treated with laparoscopic salpingectomy, G4-left tubal pregnancy treated with laparoscopic salpingectomy), BRCA1 mutation, hereditary breast and ovarian cancer, diagnostic hysteroscopy&laparoscopy and hypothyroidism. After the diagnosis was confirmed, the woman was qualified for conservative treatment: pharmacotherapy followed by hysteroscopic evacuation of abnormal tissues.
Results: CP was confirmed by transvaginal ultrasound (TVS) (Pic.1) showing an empty uterine cavity and an 11.5 mm diameter gestational sac located below the internal cervical os within the anterior endocervical wall, containing a viable embryo with crown-rump length of 2.6 mm and heart rate of 150 bpm, and a 3.1 mm diameter yolk sac. The primary concentration (day 0) of B-human chorionic gonadotrophins (B-hCG) was 4092 mIU/ml. After confirming the diagnosis and obtaining informed consent, 50 mg of methotrexate+15% potassium chloride (KCl) was administrated in an intra-amniotic injection under TVS control (day 0), resulting in embryo cardiac arrest, followed by 100 mg intravenous methotrexate administration (days 0 and 7). On day 10, the CP remnants were evacuated via operative hysteroscopy (Pic.2) using a 10 mm resectoscope, by means of cold loop without electrics. Serial B-hCG measurements were: day 4-3896 mIU/ml, day 7-4540 mIU/ml, day 10-3879 mIU/ml, day 12-1449 mIU/ml. The patient was discharged home on day 12, after obtaining a satisfactory decrease in B-hCG concentration. The hemoglobin concentration on day 0 was 13.7 g/dl, and 13.2 g/dl on day 12. Blood loss was minimal and the patient did not require blood products transfusion.
Conclusions: Combined pharmacological treatment followed by hysteroscopic evacuation of ectopic remnant products of conception is an effective and safe option in women with CP who wish to preserve fertility. Endometrial disorders resulting in embryo implantation at a location distant to the transfer site (PMCID: PMC7431202) remain a target for further research.

A11. Fresh embryo transfer complicated by cesarean scar pregnancy: a case report.

[1,2]Iwona Gawron*, [1,2]Andrzej Zmaczyński, [3]Bartosz Chrostowski, [1,2]Robert Jach

[1]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[2]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[3]Artvimed, Centre for Reproductive Medicine, Krakow
*iwona.gawron@uj.edu.pl

Introduction and purpose: Cesarean scar pregnancy (CSP) is a rare type of ectopic pregnancy, but its incidence increases with increasing rate of cesarean sections (doi: 10.1016/S0140-6736(18)31928-7). CSP may cause potentially life-threatening complications requiring an emergent hysterectomy. Due to the low incidence and heterogeneity of cases, no guidelines have been established, thus when choosing a management, treatment centers are guided by their experience and patient preferences. CSP complicating infertility treatment is even more of a therapeutic challenge, as the goal of treatment is not only to remove the lesion, but also to preserve fertility. We present a successful conservative management of CSP that occurred in the course of infertility treatment with the use of assisted reproductive techniques.
Material and methods: A 38-year-old woman, G1P1, was referred from an infertility treatment center in the 6th week of pregnancy due to a suspicion of CSP. The woman underwent a fresh single embryo transfer on the 5th day following oocyte retrieval. The embryo was transferred to half the length of the uterine cavity. The indication for in vitro fertilization was unexplained secondary infertility. The woman's medical history included cesarean section 4 years earlier, spontaneous abortion in the first trimester 2 years earlier and diagnostic hysteroscopy&laparoscopy 6 months earlier. After confirming the diagnosis of CSP and discussing the options for further management, the woman applied to the Bioethics Committee for consent to terminate the ectopic pregnancy.
Results: The ultrasound (TVS) (Pic.1) revealed an empty uterine cavity with a second-phase endometrium 10 mm thick, a single gestational sac implanted in the caesarean scar with a viable embryo with a heart rate of 154 bpm and a crown-rump length of 6.7 mm/6w4d, and a residual myometrial thickness of 2.2 mm. The baseline B-human chorionic gonadotropin (B-hCG) concentration was 7156 mIU/ml. After obtaining the consent of the Bioethics Committee to terminate an ectopic pregnancy, 50 mg of methotrexate + 15% potassium chloride was administrated in an intra-amniotic injection under TVS control (day 0) with woman's consent, resulting in embryo cardiac arrest, followed by 100 mg intravenous methotrexate administration (day 0). Serial B-hCG levels were: day 4-6644 mIU/ml, day 7-4147 mIU/ml. On day 7, the patient was discharged home and re-admitted for hysteroscopic evacuation of conception product remnants on day 27. The procedure (Pic.2) was performed using an operative hysteroscopy using a 10 mm resectoscope, by means of cold loop without electrics. The lesion was completely removed from the caesarean scar niche. The operative time was 20 minutes and blood loss approximately 50 ml. The patient was discharged the next day in good general condition.
Conclusions: Combined pharmacological and surgical treatment, after inducing a decrease in trophoblast activity, is a safe and effective treatment, sparing the reproductive organ. The mechanism by which the transferred embryo develops in the scar, postulated as the cause of secondary infertility (doi: 10.1093/humrep/dez295), remains a target for further research.

A12. Guz pęcherza moczowego u kobiety poddanej stymulacji mnogiego jajeczkowania do procedury zapłodnienia pozaustrojowego.

Dawid Maduzia[1,2*], Mateusz Ostachowski[3]
[1]Uniwersytet Jagielloński Collegium Medicum, Katedra Anatomii
[2] Centrum Leczenia Niepłodności Parens, Kraków
[3] Szpital Uniwersytecki w Krakowie, Oddział Kliniczny Urologii i Urologii Onkologicznej
*dawid.maduzia@uj.edu.pl

Wstęp i cel: Niepłodność dotyka 10-16% par w wieku rozrodczym w Polsce, łącznie jest to około miliona par. Większość par w populacji polskiej nie pozostaje pod specjalistyczną opieką ośrodków leczenia niepłodności. Rak pęcherza moczowego występuje u 2,4/100 000 kobiet, sporadycznie przed 40 rokiem życia. W 75% przypadków występuje pod postacią raka nieinwazyjnego. Wczesne rozpoznanie i odpowiednie leczenie dają szansę 5-letniego przeżycia na poziomie 96% w tej grupie pacjentów. Rak dróg moczowych w czasie ciąży jest niezwykle rzadki i dotyczy około 13/ 1 000 000 ciąż (doi:10.1067/s0002-9378(03)00537-4).
Materiał i metody: 28-letnia kobieta została przyjęta do ośrodka leczenia niepłodności z powodu 2-letnich starań o ciążę. W trakcie diagnostyki u kobiety zdiagnozowano hiperprolaktynemię i niedoczynność tarczycy, natomiast u partnera asthenoteratozoospermię, potwierdzając czynnik męski niepłodności. Włączono leczenie hormonalne hiperprolaktynemii i niedoczynności tarczycy. Partnera skonsultowano urologicznie i wdrożono odpowiednie leczenie nie uzyskując poprawy parametrów nasienia. Przeprowadzono 2 inseminacje domaciczne nasieniem partnera nie uzyskując ciąży. Parę zakwalifikowano do procedury zapłodnienia pozaustrojowego (IVF) metodą docytoplazmatycznej iniekcji plemnika (ICSI). Stymulację jajników wykonano w krótkim protokole antagonistycznym. Z uwagi na ryzyko wystąpienia zespołu hiperstymulacji jajników (OHSS) stymulację zakończono przy użyciu agonisty GnRH uzyskując 14 dojrzałych oocytów MII. Uzyskano 2 blastocysty w 5 dniu hodowli zarodków. Z uwagi na ryzyko wystąpienia OHSS transfer zarodka odroczono, a kobietę poddano obserwacji w warunkach ambulatoryjnych.
Wyniki: W toku obserwacji, z uwagi na wystąpienie epizodu bezbólowego krwiomoczu wykonano badanie ultrasonograficzne jamy brzusznej, stwierdzając w świetle pęcherza moczowego uszypułowanego guza o wymiarach 25x18 mm, o miernym unaczynieniu w badaniu metodą kolorowego dopplera. W wywiadzie nie stwierdzono czynników ryzyka raka pęcherza moczowego. Kobietę skonsultowano urologicznie i wykonano badanie obrazowe jamy brzusznej metodą tomografii komputerowej (TK), które potwierdziło lokalizację zmiany na lewej ścianie pęcherza moczowego oraz wykluczyło zmiany w górnych drogach moczowych. Kobietę zakwalifikowano do zabiegu przezcewkowej resekcja guza pęcherza moczowego (TURBT), w trakcie którego wycięto w całości („en-bloc") brodawczakowatego uszypułowanego guza egzofitycznego o średnicy 25 mm. W badaniu histopatologicznym potwierdzono raka z nabłonka dróg moczowych o częściowo odwróconym wzroście, o niskim stopniu złośliwości (low-grade) wg International Society of Urological Pathology (ISUP), bez cech naciekania podnabłonkowej tkanki łącznej i błony mięśniowej, w stopniu Ta według klasyfikacji TNM (ISBN: 978-1-119-26357-9). Zmiana została usunięta w całości. W kontrolnej cystoskopii wykonanej 3 miesiące po pierwotnej resekcji nie stwierdzono cech wznowy. Miesiąc po kontrolnej cystoskopii przeprowadzono transfer rozmrożonego zarodka w cyklu naturalnym uzyskując ciążę kliniczną. Według naszej najlepszej wiedzy jest to pierwszy opis przypadku raka pęcherza moczowego zdiagnozowanego w trakcie procedury IVF.
Wnioski: Wobec 1-5% ryzyka nawrotu oraz 4% ryzyka 5-letniej progresji do raka inwazyjnego (DOI:10.106/j.eururo.2020.12.033), kobieta wymaga kontrolnych cystoskopii co ≤ 12 miesięcy przez minimum 5 lat. Wobec powyższego ryzyka kobietę zakwalifikowano do dalszych etapów procedury IVF, zgodnie z założeniem „oncofertility". Nie jest znany wpływ hiperstymulacji jajników i ciąży na rokowanie.

A13. Pharmacological treatment of tubal pregnancy with off-label use of letrozole: a case report.

[1,2]Iwona Gawron*, [3,4]Anna Wójtowicz, [1,2]Krzysztof Skotniczny, [1,2]Robert Jach

[1]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow
[2]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[3]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Obstetrics and Perinatology
[4]University Hospital in Krakow, Clinical Department of Obstetrics and Perinatology
*iwona.gawron@uj.edu.pl

Introduction and purpose: The literature reports on the effective treatment of tubal pregnancy with letrozole (DOI:10.1016/j.fertnstert.2020.04.001). Letrozole, by decreasing the concentration of estradiol, may disturb the physiological function of the corpus luteum, leading to miscarriage. Letrozole may provide a particularly attractive therapeutic option allowing to avoid the adverse effects of methotrexate (pregnancy contraindicated for at least 3 months, uncertain effect on ovarian reserve, hematological and hepatic complications) and laparoscopic salpingotomy (typical complications of surgery, risk of losing the physiological function of the fallopian tube). Letrozole may be a potential alternative in the event of contraindications to methotrexate and the lack of consent to surgery. We present a case of successful treatment of the tubal pregnancy (TP) with off-label use of letrozole in monotherapy.
Material and methods: A 38-year-old female, G3P1, was admitted at 5 weeks of gestation with a diagnosis of a pregnancy of unknown location. On admission, she was asymptomatic. In her past medical history she reported a cesarean section 4 years earlier, one spontaneous abortion 2 years earlier and polycystic ovary syndrome. Gynecological and transvaginal ultrasound (TVS) examinations were performed to diagnose TP in proximal portion of the right fallopian tube. After presenting possible treatment options: pharmacological treatment with methotrexate or letrozole, or surgical treatment by laparoscopic salpingotomy, the woman decided to be treated with off-label letrozole (participation in a clinical trial after giving informed consent, consent no. 1072.6120.321.2020). After achieving a satisfactory decrease in B-hCG concentration, the woman was discharged home and followed-up in outpatient clinic.
Results: TVS revealed a 28 mm lesion located in the proximal portion of the right fallopian tube, corresponding to an ectopic pregnancy in the right cornual portion of the uterus (DOI:10.1002/jum.14207). The basal concentration (day 0) of B-human Chorionic Gonadotropin (B-hCG) was 2901 mIU/ml. Letrozole was administered at a dose of 2.5 mg twice daily orally for 10 days. Serial B-hCG levels were: day 4-2956 mIU/ml, day 7-2136 mIU/ml. The course of hospitalization was uneventful. The woman was discharged home in good general condition on day 7, and then she was followed up in the outpatient clinic. The ultrasound images of the lesion over time are shown in Pic. 1. B-hCG concentration, typical for non-pregnant women, was obtained on day 60. Another follow-up was made because of a positive pregnancy test. TVS revealed a normal early pregnancy and a typical corpus luteum in the left ovary. The course of pregnancy was uneventful. In the 39th week of pregnancy, a cesarean section was performed, giving birth to a healthy full-term male newborn.
Conclusions: Treatment with letrozole alone was found to be an effective and safe option enabling achieving subsequent pregnancy. Identifying the target population that would benefit from letrozole treatment and the most appropriate dosing regimen remains a target for further research.

A14. Hormonal and metabolic profile in women with premature ovarian insufficiency versus age-matched premenopausal and postmenopausal women.

Magdalena Piróg[1], Anna Pulka[1], Olga Kacalska-Janssen[1], Robert Jach[1]
[1]Klinika Endokrynologii Ginekologicznej i Ginekologii, Szpital Uniwersytecki w Krakowie, Collegium Medicum Uniwersytetu Jagiellońskiego

Introduction and aim: Estrogen deficiency observed mainly in postmenopausal women lead to dyslipidemia and insulin resistance and, consequently, increase the risk of metabolic syndrome and cardiovascular disease (CVD), which remains to be the most common female cause of morbidity and mortality in Europe. Women with primary ovarian insufficiency (POI) experience the most extreme form of menopause since estrogen deficiency period last nearly half of their lifetime and therefore have higher risk of CVD development.
The aim of this study is to determine the metabolic phenotype in women with POI and compare it with age-matched women with preserved ovarian function and postmenopausal women.
Materials and methods: In this prospective case-control study three hundred thirty-nine women from the Department of Gynaecological Endocrinology of the University Hospital were enrolled between Jan 2015 to Dec 2021 to one of the following groups:
1) women with POI (n=116)
2) premenopausal women age-matched to POI women (n=116).
3) postmenopausal women >40 yrs old (n=127).
We collected data containing the age of menarche and the date of last menstruation, medical history. The following measurements were performed: weight, height, blood pressure. BMI was calculated as weight (kg) divided by the square of height (m^2). Hormones (including estradiol, testosterone, FSH, LH, dehydroepiandrosterone sulphate – DHEA-S), sex hormone binding globuline (SHBG), lipid profiles together with both glucose (Glu), and insulin (Ins) levels indicated during oral glucose tolerance test (OGTT) were marked in all women.
Results:
<u>POI vs. premenopausal women:</u>
Our study showed no differences regarding BMI between POI women and age-matched participants. In the POI group, we found less favourable lipid profile reflected by elevated both total cholesterol (+5.8%) and LDL-C levels (+10.2%) compared to the premenopausal women. In contrary to the healthy women, POI group showed higher Glu0 level (+3.9%) together with increased both Ins60 and Ins120 levels (+8.5% and +49.6%, respectively). Intergroup analysis revealed typical differences in hormone changes indicated by both elevated FSH (by 11.5 - times) and LH levels (by 4.2-times) accompanied by reduced E_2 concentration (by 12.1-times) in POI group compared to the remaining group. POI women had 1.3% lower DHEA-S than women with preserved ovarian function.
<u>POI vs. postmenopausal women:</u>
In general, POI group demonstrated lower E2 (by 2.87-times) along with higher FSH (+12.1%), LH (+20.8%), testosterone (+73.8%), DHEA-S (+42%) and TSH (+31.55%) compared to all postmenopausal women. POI women showed unfavorably altered metabolic profile reflected by increased TG (+14.4%) along with elevated both Ins0 (+52%) and Ins120 (+21.3%) in contrary to all postmenopausal women.
Conclusions: POI women showed unfavourably altered metabolic profile when compared to age-mathed premenopausal women and postmenopausal ones. Implementation and appropriate metabolic diagnostics and treatment in women with POI may allow to reduce the impact of hypoestrogenism and the development of CVD.

A15. Disorder of sex development in 17-year-old Tanzanian.

[1]Karolina Zeman*, [1,2]Robert Jach

[1]University Hospital in Krakow, Clinical Department of Gynecological Endocrinology and Gynecology
[2]Jagiellonian University Medical College, Department of Obstetrics and Gynecology, Clinic of Gynecological Endocrinology, Krakow

*karolinazeman@gmail.com

Introduction and purpose: Disorders of sex development (DSDs) are rare congenital conditions with atypical development of chromosomal, gonadal or anatomical sex which may manifest in abnormalities of external and/or internal genitals. The diagnostics is based on the karyotype. The aim was to present a case of DSD diagnosed in a third world country where access to basic diagnostic tools is limited.

Material and methods: A 17-year-old Tanzanian, identifying himself as a man, presented for the examination during Doctors Africa (http://www.doctorsafrica.org) Medical Mission in Maganzo - Bukombe San Pio Health Centre, Tanzania, due to an inability to have sexual intercourse. The patient's past medical and family history were otherwise non-specific. **Results:** Examination of the external genitalia revealed fused labial folds, clitoral hypertrophy and male type urethra (Pic. 1). There was no evidence of the presence of testicles in the inguinal canals on palpation. There were no palpable masses on abdominal examination. Breast glandular tissue was slightly manifested. Apart from the above, no abnormalities were found in the physical examination. A transabdominal ultrasound scan (USS) revealed bilateral testes located in the lesser pelvis and the lack of uterus and ovaries (Pic. 2). The concentration of Follicle-Stimulating Hormone (FSH) in the blood serum was determined with a result > 100 mIU/ml, indicating hypergonadotropic hypogonadism. Taking into account the inability to determine the karyotype and perform genetic counseling in rural conditions, the patient was referred to the hospital in Mwanza. The patient was also advised to perform an elective orchidectomy in order to reduce the oncological risk.

Conclusions: The consequences of DSDs may be stigmatization and social exclusion, especially in developing countries. The karyotype test is crucial for the diagnosis. The lack of diagnosis and medical care prevent the individual from fulfilling his social roles, which can have fatal consequences in African countries.