family history and paraclinical ones: laboratory findings, histopathology, and immunofluorescence).

**Key words:** "pruritus of pregnancy", "intrahepatic cholestasis of pregnancy", "dermatoses of pregnancy";

## 194. STRUCTURAL LESIONS OF THE UMBILICAL CORD AND THEIR OUTCOMES

Author: Alina Alsatou

Scientific adviser: Iurie Dondiuc, MD, PhD, Associate Professor, Department of Obstetrics and Gynecology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

**Introduction.** The umbilical cord (UC) plays a crucial role in fetal health and development, which provides communication between the placenta and the fetus allows gas and nutrient exchange. This unique lifeline needs optimal protection which is provided by Wharton's jelly, amniotic fluid, helical patterns and coiling of the umbilical vessels. It has been suggested that diameter of the umbilical cord is determined by the water content of Wharton's jelly. The lean UC is a structural abnormality, characterised by reduced or completely absent Wharton's jelly. Its three blood vessels pass along the length of the cord in a coiled or helical fashion (spiral course). The coiled umbilical cord perhaps of its elastic properties, is able to resist external forces that might compromise the umbilical vascular flow. Thus, cord abnormalities related to morphology, coiling, number of vessels, diameter, and blood flow pattern can contribute to perinatal complications.

**Aim of the study**. To study the association of structural abnormalities of the umbilical cord with perinatal outcomes.

Materials and methods. This prospective study included 190 patients divided into 2 groups. The study group (L1) included 95 patients with umbilical cord abnormalities and the control group (L0) with normal umbilical cord. We measured the diameter of the UC in a transverse section in the 3 parts and the cord coiling index after delivery of the adnexal complex. The statistical tests were assessed with SPSS, SAS and Microsoft Excel software and statistically analyzed. P value of less than 0.05 was regarded as statistically significant. This study was approved by institute ethical committee.

**Results.** According to the age criterion, living environment, marital status, the examined lots were homogeneous. In the study group the rate of lean UC was 12.6% (24) in all singleton pregnancies with the cord diameter from 0.4 to 0.7 cm. Umbilical coiling lesions was determined as hypocoiled cord – 35.79% (34) and hypercoiled – 7.37% (7) cases. Anomalous lean cord was associated with an increased risk of intrauterine growth restriction (IUGR) (p=0.0001), nuchal cord (p<0.0001), abnormal cord insertion (p=0.003), fetal hypoxia (p<0.0001), pathological adaptation period (p<0.0001) and neonatal morbidity (p=0.01). Hypocoiling was found to be significantly associated with fetal heart rate abnormalities (p<0.0001), the admission of the newborn in the neonatal intensive care (p<0.0001) and neurological disorders of the newborn (p=0.02). Hypercoiling was found to be associated with fetal distress, pathological adaptation period, neonatal morbidity, which demanded a transfer to other medical facilities (p<0.05).

**Conclusions.** In our study was found significant increase in the risk for an intrauterine growth restriction, fetal distress and interventional delivery for non-reassuring fetal status if cord abnormality was observed. Therefore, structural lesions of the umbilical cord were associated with several antenatal and neonatal adverse features.

**Key words:** structural lesions, umbilical cord, adverse features.

## 195. THE HUMAN ENDOMETRIUM IN PRIMARY INFERTILITY PATIENTS

Author: Mihaela Burac

Scientific adviser: Valentin Friptu, MD, PhD, University Professor, Department of Obstetrics and Gynecology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Endometrial dysfunction represents the morpho-functional changes of the endometrium, which can be reversible or irreversible, based on disruption in molecular mechanisms that lead to infertility, embryo implantation disruption or embryo death.

**Aim of the study.** Evaluation of clinical and morphological particularities of endometrial dysfunction in patients with primary infertility.

**Materials and methods.** We provided a prospective study, which included 96 patients divided into 2 groups. The study group included 48 patients with primary infertility and the control group: 48 fertile patients. In both groups we performed endometrial biopsy in the proliferative phase with Pipelle endometrial suction curette. The study was approved by the Research Ethics Committee of the State University of Medicine and Pharmacy "Nicolae Testemitanu", Chisinau, Republic of Moldova (No. 79/62 of 26.04.2017). Patients have signed informed consent to participate in the research. All data management and analyses were performed using SPSS 20 and Microsoft Excel 2016.

**Results.** The mean age in the study group was  $29.0 \pm 4.58$  and in the control group  $29.2 \pm 4.29$  (p = 0.801). The analysis of gynecological pathologies that had an impact on the patient included in the study showed that: the pathology of the fallopian tubes were found in L1 68.8% (n = 33) vs L0 0% (n = 0),  $\Box 2 = 50,286$ ; p  $\Box$  0,001, the ovary pathology was reported by patients in L1 in 52.1% (n = 25) versus L0 in 8.3% (n = 4),  $\Box 2 = 21.789$ ; p <0.001, uterine pathology L1 16.7% (n = 8) vs. L0 2.1% (n = 1),  $\Box 2 = 6.008$ ; p = 0.014. Inflammatory changes in the endometrium at histological examination were in L1 79.2% (n = 38) vs L0 31.3% (n = 15),  $\Box 2 = 22.238$ ; p $\Box 0,001$ .

**Conclusions.** Primary infertility patients have an increased incidence of chronic salpingitis, hydrosalpinx, adhesions and endometrial dysfunction.

Key words: primary infertility, endometrial dysfunction, microbiome.

## 196. USE OF VISUAL PAIN RATTING TOOLS IN DIAGNOSYS OF DYSMENORRHEA IN ADOLESCENT GIRLS

Author: Dorina Leşco

Scientific adviser: Stelian Hodorogea, MD, PhD, Professor, Department of Obstetrics and Gynecology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.