

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**



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Solovei V.M.

HISTOLOGICAL STUDY OF CHORIONAL HORMONES CHARACTERISTICS IN MISCARRIAGE IN THE FIRST TRIMESTER OF GESTATION

*Department of Obstetrics, Gynecology and Perinatology
Bukovinian State Medical University*

Introduction. The problem of miscarriage in the world obstetrics is one of the most important. In Ukraine, the frequency of miscarriage reaches 15–27% of all diagnosed pregnancies. 25% of women of the reproductive age have a history of at least one case of pregnancy loss.

The aim of the study. To study the immunohistochemical features of chorions' state in miscarriages in the first trimester of pregnancy.

Material and methods. An immunohistochemical study of trophoblast hormones, namely placental lactogen and chorionic gonadotropin, was conducted. 23 chorions with spontaneous abortion in the 1st trimester of pregnancy (main group) and 20 chorions with artificial abortions (control group) were studied. Immunohistochemical methods were used on serial sections in accordance with the protocols provided by the manufacturer. The staining results were measured by the computer microdensitometry method according to the optical density of the specific staining in relative optical density units (units of optical density).

Results. The optical density of specific staining for placental lactogen (immunohistochemical study) in the trophoblast of the chorionic villi of the material of the fertilized egg with a gestation period of 7-12 weeks in miscarriages and artificial abortions demonstrates that in miscarriages the intensity of staining of the trophoblast of the chorionic villi is significantly lower on average (0.145 ± 0.0063 units of optical density) than with artificial abortions (0.181 ± 0.0087 units of optical density). This fact is important, considering the significant role of placental lactogen in the processes of chorionic villi maturation, in the metabolism of proteins, in the processes of angio- and vasculogenesis ($p < 0.05$). Probability divergence by Student criterion – 0,009. Authenticity discrepancy according to Mann-Whitney criterion – 0,016. During the study, a more intense staining for placental lactogen in the chorionic villus was noted by us, observed in the zone of syncytiotrophoblast location, while the zone of cytotrophoblast location shows a lower intensity of specific staining for placental lactogen. Regarding the study of pregnancy hormones, it is worth noting that in the first trimester of pregnancy, chorionic gonadotropin is even more important for the development of the chorion. The optical density of the specific staining for chorionic gonadotropin in the trophoblast of the chorionic villi of the material of the fertilized egg with a gestation period of 7-12 weeks in miscarriages is 0.112 ± 0.0058 (o.d. optical density) and artificial abortions 0.264 ± 0.0099 (o.d. opt. density). We can see not only that the intensity of specific immunohistochemical staining for chorionic gonadotropin (according to the optical density of staining with diaminobenzidine) decreases with miscarriages, but also that such a decrease is very noticeable - more than two times ($p < 0.05$).

Conclusions. Therefore, as a result of the performed immunohistochemical study in the trophoblast of the chorionic villi of the material of the fertilized egg in the first trimester of pregnancy, it has been established that the intensity of specific immunohistochemical staining of both chorionic gonadotropin and placental lactogen decreases during miscarriages.

Tsysar Y.V.

MODERN CONCEPTS OF POLYMORPHISM IN THE DIAGNOSIS OF PUBERTAL UTERINE BLEEDING

*Department of Obstetrics and Gynecology
Bukovyna State Medical University*

Introduction. Studying the genetic prerequisite for the development of uterine bleeding in girls of puberty age under existing thyroid pathology and without concomitant pathology is one of the top tasks of pediatric gynecology.