1. CHORIO-VILLOUS MESENCHYMAL STROMAL DYSPLASIA IN THE COURSE OF PREGNANCIES

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Introduction. Mesenchymal stromal dysplasia is a developmental anomaly of the placenta that is characterized microscopically by dilated stem villi with a myxoid or hydropic appearance, cisterna lacunae, and lack of trophoblastic proliferation in association with thick-walled blood vessels. The listed changes in structure lead to abnormalities in function of placenta and frequently associates with complications during pregnancies such as: intrauterine growth restriction, perinatal death, premature birth; emphasizing the crucial significance of detecting it early.

Aim of study. This study aimed to examine the multidisciplinary approach in the diagnosis of placental mesenchymal dysplasia, while addressing the possible etiopathogenetical mechanisms suspected in its origin.

Methods and materials. The study was conducted based on retrospective reviews, various scientific data, and specialized articles obtained through search engines such as PubMed, Google Scholar, Embase.

Results. Focusing on the most recent articles, the etiopathogenetical foundation is based on the androgenetic biparental mosaicism and chimera formation, depicted as failed replication of maternal genome after fertilization or as a result of dispermy phenomena. Molecular differences can be determined by genetically testing chorionic villous samplings. Beside genetic findings, integrating early ultrasound monitoring, clinical and laboratory screening, and morphological examination allows for improved surveillance of gestation, leading to better outcomes for pregnancies resulting in a normal delivery of the fetus.

Conclusion. Placental mesenchymal dysplasia is a condition that may have detrimental effects on fetal health but does not exclude a normal delivery. Therefore, providing necessary diagnostic efforts can aid in resolving complex clinical cases.