



6. MORPHOLOGICAL AND IMMUNOHISTOCHEMICAL FEATURES IN THE DIFFERENTIAL DIAGNOSIS OF HYDATIFORM MOLE

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Introduction. Hydatidiform mole is a pathological pregnancy that belongs to the gestational trophoblastic diseases group. During histomorphological lesion examination, differentiating between molar and non-molar lesions can be challenging due to morphological masking leading to imprecise results.

Aim of study. The aim of this study is to evaluate the morphological and immunohistochemical features in the differential diagnosis of hydatidiform mole.

Methods and materials. During this study information from databases such as PubMed, Scopus, Google Scholar, academic social networks such as ResearchGate and medical books published by: Elsevier, Springer, etc. has been utilized.

Results. Hydatidiform mole is a pathological pregnancy with a varying degree of trophoblast proliferation classified as part of molar pregnancies in the gestational trophoblastic disease group, which morphologically and cytogenetically can be either partial (with the predominance of genetic material from the father) or complete (only paternal genetic material is present). Complete hydatidiform mole's chorionic villi are enlarged with marked generalized hydrops, with often present cistern formation, with marked circumferential trophoblast hyperplasia, with marked trophoblast atypia at the implantation site and lack of fetal vessels and RBCs. Meanwhile, in partial hydatidiform mole are present 2 populations of villi – one with enlarged villi with scalloped and irregular contours and one with small fibrotic villi, frequent cistern formation, minimal trophoblast atypia, and the presence of fetal vessels and RBCs. Immunohistochemically, the genetic product of CDKN1C - p57 is applied, which will lack expression in CHM, and will be expressed in PHM.

Conclusion. The differential diagnosis of hydatidiform mole offers the possibility of establishing an accurate diagnosis and preventing medical errors.