

Validity of P^{oV}kip^γ immunohistochemical marker in differential diagnosis of molar pregnancy

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Abstract

Objective: The differentiation of complete mole from partial mole and hydropic abortion is very important for patient management. The aim of this study was to determine the validity of p^{oV}kip^γ in the diagnosis of hydatidiform mole. **Material and Method:** Immunohistochemistry with the P^{oV}kip^γ antibody was done in formalin-fixed paraffin-embedded samples of hydropic abortion (n=20), simple abortion (n=20), partial hydatidiform mole (n=20) and complete hydatidiform mole (n=20). Immunoreactivity was recorded separately in the different cellular components, such as villous cytotrophoblast, extravillous trophoblast, syncytiotrophoblast, stromal cells, and decidual cells. Then data were analyzed with suitable statistical test. **Results:** In partial hydatidiform mole and also in simple and hydropic abortion, nuclear P^{oV}kip^γ expression was observed at high frequency in cytotrophoblast, villous stromal cells and maternal decidua, but was absent in syncytiotrophoblast. Absent of nuclear immunoreactivity of cytotrophoblasts was detected in the majority (90%) of complete hydatidiform mole. Significant difference was seen for P^{oV}kip^γ expression in complete hydatidiform mole in comparison with hydropic abortion (P=0.001) and partial hydatidiform mole (P=0.001). **Conclusions:** This study confirms that P^{oV}kip^γ immunohistochemistry can reliably identify most cases of complete hydatidiform mole and distinguishes it from hydropic abortions and partial hydatidiform mole.

Author keywords

Complete mole; Hydropic abortus; P^{oV}kip^γ; Partial mole

Indexed Keywords

EMTREE drug terms: cyclin dependent kinase inhibitor 1C

EMTREE medical terms: abortion; adolescent; adult; article; controlled study; cytotrophoblast; decidua; differential diagnosis; female; human; human cell; human tissue; hydatidiform mole; immunohistochemistry; immunoreactivity; major clinical study; protein expression; stroma cell; syncytiotrophoblast; trophoblast

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