Case Report

Exaggerated placental site with term pregnancy

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ABSTRACT

Exaggerated placental site is a non-neoplastic lesion characterized with infiltration of extravilleous intermediate trophoblasts into the myometrium and the walls of blood vessels of the normal placental implantation area. Typically, they were seen in spontaneous and/or elective abortion materials. Rarely, the clinical picture may be associated with normal pregnancy or postpartum bleeding. A case of an exaggerated placental site is presented in this article. To our best knowledge, this is the first case demonstrating an association between exaggerated placental site and term pregnancy. It is aimed to review the current information about this rare condition.

KEY WORDS: Exaggerated placental site, intermediate trophoblast, term pregnancy, postpartum hemorrhage.

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INTRODUCTION

Intermediate trophoblastic lesions include exaggerated placental site, Placental site nodule, Placental site trophoblastic tumor, and epitheloid type of trophoblastic tumor.[1] "Exaggerated placental site" is a non-neoplastic lesion which is characterised by extravillous "intermediate" trophoblasts and syncytiotrophoblasts' infiltrating endometrium, myometrium and blood vessel walls widely increasing in number in normal placental implantation area.[1-5] They are often observed in spontaneous and/or elective abortus materials.[2,5] They are rarely related with normal pregnancy and can appear with postpartum haemorrhage clinic.[4] Intermediate trophoblastic lesions may occur in unexpected clinical situations such as perimenopause, and they may occur in localizations outside endometrium such as cervix and fallopian tubes as well.[6-10]

CASE REPORT

A woman who was in the 38th week of pregnancy and whose gravida was 2 and parity was one came to our clinic. The woman who came to emergency service of gynaecology upon her stomach ache and spasm was taken under an urgent caesarean section because of the fact that cervical opening was determined in gynaecological examination and her previous childbearing was under caesarean section. No sooner the baby was delivered under caesarean section and placenta separated, than intensive intraoperative bleeding was observed. Particularly, as a result of the fact that the bleeding intensified and could not be controlled following the separation of placenta, hysterectomy operation was performed with the pre-diagnosis of clinical atonia bleeding after receiving consent.

In the macroscopic examination of hysterectomy specimen, myometrium was found irrregular and quite bleeding in a part of placenta which suits to implantation area. As for the microscopic examination, plenty of mononuclear and multinuclear trophoblastic cells having large

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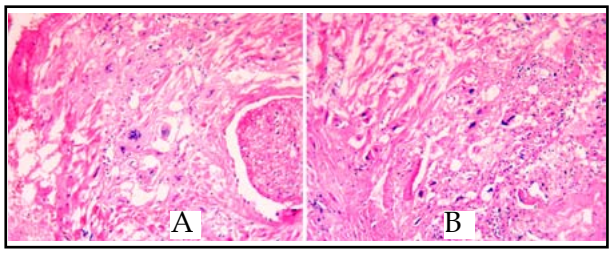

Fig.1: A: Increased number of intermediate trophoblastic, multinucleated, and mononucleated cells infiltrating myometrium and vessel wall; B: Trophoblastic cells with marked atypia and pleomorphism (H&Ex4).

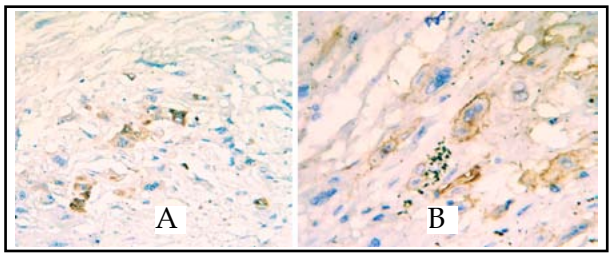

Fig.2: A: Trophoblastic intermediate cells indicating positive immun-reactivity with human placental laktogen (H&Ex10); B: Trophoblastic intermediate cells indicating positive immun-reactivity with CD10 (H&Ex20).

eosinophilic cytoplasms in the implantation area were observed to infiltrate myometrium and blood vessel wall one by one or in little cords (Fig.1A). There was no mitotic activity and necrosis in these fields, however, atypia and pleomorphism was observed in the cells conspiciously (Fig.1B). In these cells, CD10 and hPL with diffuse (+), hCG and placental alkalane phosphatase with (-) immunoreactions was determined immunohistochemically (Fig. 2A and 2B). Ki67 index was observed under 1%. The case was diagnosed as 'exaggerated placental site' due to the fact that this immunophenotype supported to the trophoblast character of the cells.

DISCUSSION

Exaggerated placental site was characterized with exaggerated and increased infiltration of endometrium and myometrium by intermediate trophoblasts in the implantation area of the placenta increasing in number.[1,5,11] The fundamental function of the intermediate trophoblasts is to provide maternal-fetal circulation during early pregnancy entering into spiral arteries in the basal layer.[12] Intermediate trophoblasts infiltrate only the upper part of myometrium in the first trimester physiologically and then they should regress progressively.[5]

Exaggerated placental site is a lesion which frequently appears in abortus materials.[1] Different clinical presentations and involvement areas were identified as well.[5-9] However, postpartum bleeding was not encountered a lot, and it is unthinkable at first in the differential diagnosis of postpartum bleeding among the placental-uterine pathologies. Nevertheless, exaggerated placental site is an entity which should be taken into consideration and thought among pre-diagnosis when it is prolonged postpartum hemorrhage clinic.[6] Whereas it is easy to correlate between "Exaggerated placental site" reaction and normal pregnancy or abortus, it is essential to be taken into consideration that establishing this relationship is rather difficult in placental site trophoblastic tumor, placental site nodule and other intermediate trophoblastic proliferations due to the years passing over. Sufficient differential diagnosis can be made for these trophoblastic lesions by the help of immunohistochemical profiles and histopathological features identified in detail in classical books and literature.[13-15]

We would like to attract attention once more to clinical manifestation of exaggerated placental site which is not frequently seen apart from its histopathological features reaction in company with the literature.

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