

Original Research Paper**The Ectopic peritoneal deciduosis of pregnancy – a rare entity.**

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Article Received: 19-07-2022**Revised:** 09-08-2022**Accepted:** 29-08-2022

Abstract-The Ectopic decidual reaction of peritoneum and omentum is very rare in occurrence as it is commonly seen in ovary and cervix. It is characterised by stromal It is however a physiological phenomenon due to exaggerated response of progesterone in pregnancy. It is usually asymptomatic and incidental histological finding. It disappears without complication in the post partum period. It has been hypothesised that peritoneal deciduosis develops with time due the effect of progesterone on subserosal stromal cells. it can mimic metastatic deposits within peritoneum. Hence, it is must to diagnose it accurately to avoid overtreatment and unnecessary expenditure. Here, we present a rare case of ectopic peritoneal deciduosis in primi gravid.

Keywords: *Decidua, Ectopic, Omentum, Vimentin*

Introduction-The presence of Ectopic decidual reaction of peritoneum and omentum is very rare in occurrence as it is commonly seen in ovary and cervix⁽¹⁾. It is however a physiological phenomenon due to exaggerated response of progesterone in pregnancy. It is usually asymptomatic phenomenon⁽²⁾. It carries excellent prognosis. It resolves spontaneously and has favourable outcome. The role of imaging is not established in detection of ectopic decidual tissue as it is non specific. It is an incidental histopathological finding⁽¹⁾. It may mimic as tubercles in peritoneum⁽¹⁾ and mesothelioma⁽¹⁾. It can also be confused with metastatic deposits⁽⁵⁾. Hence, it is important to diagnose it accurately to prevent overt and unnecessary treatment. Immunohistochemistry plays a pivotal role for its confirmation⁽³⁾. Here, we present a case of Pregnancy associated ectopic decidual tissue in omentum. A 27yr old nulligravida presented to the obstetrics and gynecology outpatient department at term for routine checkup with complaints of mild vague left sided abdominal pain. Pelvic USG and MRI was non specific and unremarkable. She was planned for elective cesarean section. During laparotomy occasional whitish nodules were noticed on surface of omentum. Therefore, omental biopsy was taken for Histopathological examination. Microscopy

revealed clusters of large polygonal cells with abundant eosinophilic cytoplasm, large centrally placed nuclei with conspicuous nucleoli within adipose tissue along with blood vessels. The clusters are also see beneath the peritoneal lining. The chronic inflammatory infiltrate and hemosiderin laden macrophages also seen. Provisional diagnosis of ectopic decidual tissue was made. Immunohistochemistry was put to confirm the origin of the cells and also to rule out metastatic deposits and mesothelioma⁽³⁾. Immunohistochemically, the cells clusters showed strong positivity for Vimentin (vim) and Progesterone Receptor(PR) which confirms them to be deciduas. However, Negative for CK7 and calretinin which rules out the possibility of metastatic carcinoma⁽⁵⁾ and mesothelioma respectively. Ectopic decidua is defined as deposits of stromal decidual cells in extra uterine locations. It can occur in majority of pregnancies usually seen in ovary and cervix. However, peritoneal deposition is extremely rare presentation. It's an incidental histopathological finding. It is usually an asymptomatic condition but if ignored lead to serious complication like intraperitoneal hemorrhage. It is a benign entity and should not be misdiagnosed⁽⁴⁾. It can present as diagnostic challenge for both pathologists and

clinicians as omental and peritoneal adhesions mimic metastatic deposits. Therefore, it is important to diagnose it accurately to avoid over treatment and unnecessary burden on patients. Hence, histopathological examination along with immunohistochemistry confirmation is must and mandatory. It has been studied before that presence of incidental whitish deposits within omentum during cesarean section might raise suspicion for peritoneal tubercles and malignancy⁽¹⁾. Studies hypothesized ectopic peritoneal decidualosis as asymptomatic phenomenon⁽²⁾.

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FIGURE-1-(H&E, 40X) –Large polygonal decidual cells in clusters with blood vessels

FIGURE-2-(IHC, 40X) –Vimentin- strong cytoplasmic positivity in decidual cells

FIGURE-3-(IHC, 40X) - PR- Strong nuclear positivity in decidual cells

FIGURE-4-(IHC, 40X) - Cytokeratin 7- Negative in decidual cells clusters

FIGURE-5-(IHC, 40X) - Calretinin – Negative in decidual cell clusters and positive in mesothelial lining





