



## Ectopic Decidua Mimicking Metastatic Lesions and Peritoneal Tubercules; Deciduosis

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### Case Report

#### History

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### ABSTRACT

**Aim:** Decidual cell groups outside the endometrium, "ectopic decidua" or "deciduosis", are commonly seen in the ovary and cervix. However, peritoneal localization is rare. Peritoneal deciduosis is usually an incidental histological finding in the form of white-yellow nodules resembling tuberculosis. Peritoneal deciduosis is macroscopically similar to peritoneal carcinomatosis and peritoneal tubercles, and microscopically may pose diagnostic difficulties with decidual mesothelioma, metastatic carcinoma and metastatic malignant melanoma. The purpose of this case report is to evaluate the clinical and histopathological features of ectopic decidua, which was detected as an incidental finding in the peritoneum and omentum during a cesarean section in our clinic, as it may mimic malignancy.

**Case:** Multiple gray-white colored, raised nodules, the largest of which was 1 cm, were observed in the bladder peritoneum and omentum during laparotomy. Biopsies were taken from the peritoneum and omentum for histopathological examination. The pathological diagnosis was reported as deciduosis.

**Conclusion:** Although these lesions that we encountered during our laparotomies resemble metastatic malignant lesions and peritoneal tubercles macroscopically, ectopic decidual tissue due to pregnancy is a benign lesion and resolves without any treatment in the postpartum period, and therefore should be kept in mind in the differential diagnosis when we encounter such lesions.

**Keywords:** Deciduosis peritonei, Differential Diagnosis, Ectopic decidua.

## Metastatik Lezyonları ve Peritoneal Tüberkülleri Taklit Eden Ektopik Desidua; Desiduozis

### Olgu Sunumu

#### Süreç

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### ÖZET

**Amaç:** Endometrium dışındaki desidual hücre grupları olan "ektopik desidua" veya "desiduozis" over ve servikste yaygın görülür. Ancak peritoneal lokalizasyon nadirdir. Periton yerleşimli desiduozis genellikle tüberküloza benzeyen beyaz sarı nodüller şeklinde rastlantısal histolojik bulgulardır. Periton yerleşimli desiduozis makroskopik olarak peritoneal karsinomatozis ve peritoneal tüberküllerle benzerdir, mikroskopik olarak desiduoid mezotelyoma, metastatik karsinom ve metastatik malign melanom ile tanısal zorluk oluşturabilir. Bu olgu sunumunun amacı kliniğimizde yapılan sezaryen ameliyatı sırasında periton ve omentumda tesadüfi bir bulgu olarak saptanan ektopik desidua olgusunun maligniteyi taklit edebilmesi nedeniyle klinik, histopatolojik özelliklerinin değerlendirilmesidir.

**Olgu:** Laparotomide mesane peritonu ve omentumda en büyüğü 1 cm.lik multipl gri-beyaz renkli yüzeyden kabarık nodüller izlendi. Histopatolojik inceleme için periton ve omentumdan biyopsiler alındı. Patolojik tanı desiduozis olarak raporlandı.

**Sonuç:** Laparotomilerimiz sırasında karşılaştığımız bu lezyonlar makroskopik olarak metastatik malign lezyonlara ve periton-omenta tüberküllere benzese de, gebeliğe bağlı ektopik desidual doku benign bir lezyondur ve postpartum dönemde herhangi bir tedaviye gerek kalmadan düzeler ve bu nedenle bu tarz lezyonlar ile karşılaştığımızda ayırıcı tanıda akılda tutulması gerekir.

**Anahtar Kelimeler:** Kelimeler: ayırıcı tanı, desiduozis, ektopik desidua

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## Introduction

“Ectopic decidua” or “deciduosis”, groups of decidual cells outside the endometrium, are commonly seen in the ovary and cervix.<sup>1-4</sup> Deciduosis is a physiological phenomenon of pregnancy.<sup>5-7</sup> It is thought to result from progesterone-induced metaplasia of the coelomic stroma and is usually completely reversible (four to six weeks postpartum).<sup>5</sup> It has been detected in approximately 90% of patients who underwent laparotomy during pregnancy.<sup>7</sup> However, peritoneal localization is rare.

Peritoneal deciduosis (PD) is usually an incidental histological finding in the form of white-yellow nodules resembling tuberculosis.<sup>1,8</sup> PD is similar to peritoneal carcinomatosis and peritoneal tubercles macroscopically, and may pose diagnostic difficulties with decidual mesothelioma, metastatic carcinoma, and metastatic malignant melanoma microscopically.<sup>1,3,8-10</sup> The aim of this case report is to evaluate the clinical and histopathological features of ectopic decidua, which was detected as an incidental finding in the peritoneum and omentum during a cesarean section in our clinic, because it can mimic malignancy.<sup>4,5</sup>

## Case

A 31-year-old patient with a second pregnancy underwent a cesarean section at 39 weeks of gestation due to a previous cesarean section indication. The patient had a medical history of Hashimoto's thyroiditis, Rh incompatibility, and a cesarean section 7 years ago. Multiple gray-white colored, raised nodules, the largest of which was 1 cm, were observed in the bladder peritoneum and omentum at laparotomy. Biopsies were taken from the peritoneum and omentum for histopathological examination. The patient's postoperative period was uneventful.

## Pathology

The macroscopy of the tissue sample was reported as 1 piece of tissue with irregular appearance, gray-white color, 1x0.5x0.4 cm in size. Immunohistochemical analysis was

performed using Ventana Brand Benchmark Ultra model automatic device. CD68: Positive in histiocytes, PanCK: Negative. The definitive diagnosis was reported as deciduosis.

## Discussion

Ectopic decidua or deciduosis is most commonly seen in the ovary, cervix, uterine serosa, lamina propria of the tube uterina, while it is rare in the peritoneum, omentum, appendix, diaphragm, liver, spleen, para-aortic-pelvic lymph nodes, and renal pelvis.<sup>8,12-16</sup> Peritoneal ectopic decidua is found incidentally in biopsy materials taken during operations such as tubal pregnancy, elective tubal ligation, cesarean section, and appendectomy. However, as in our case, it can also present without symptoms or with symptoms such as hemoperitoneum,<sup>11,17,18</sup> pain mimicking appendicitis,<sup>15,19</sup> hydronephrosis or hematuria due to renal pelvic involvement, or with life-threatening complications such as mechanical ileus.<sup>14,16</sup> Most cases of ectopic decidua are related to normal pregnancy, as in our case.<sup>16,17</sup> It is said to be a result of the exaggerated response of the endometrium to progesterone during pregnancy. The fact that the lesion resolves when the hormonal stimulus ends also supports this theory. However, it has also been reported that in cases of deciduosis found in non-pregnant or postmenopausal women, this condition is associated with an active corpus luteum or adrenal cortex that secretes progesterone.<sup>9</sup> In conclusion, although these lesions that we encounter during our laparotomies may macroscopically resemble metastatic malignant lesions and peritoneal tubercles, ectopic decidual tissue due to pregnancy is a benign lesion and resolves without any treatment in the postpartum period, and therefore should be kept in mind in the differential diagnosis when we encounter such lesions.<sup>4</sup>

**Figure 1A-B:** In the sections of the material obtained as a result of the biopsy performed from the peritoneum, there are cells with large eosinophilic cytoplasm and thin chromatin, some with vacuolization, scattered singly within the loose stroma (blue arrow). Mitosis and necrosis are not observed. These cells were not stained by PanCK immunohistochemistry.

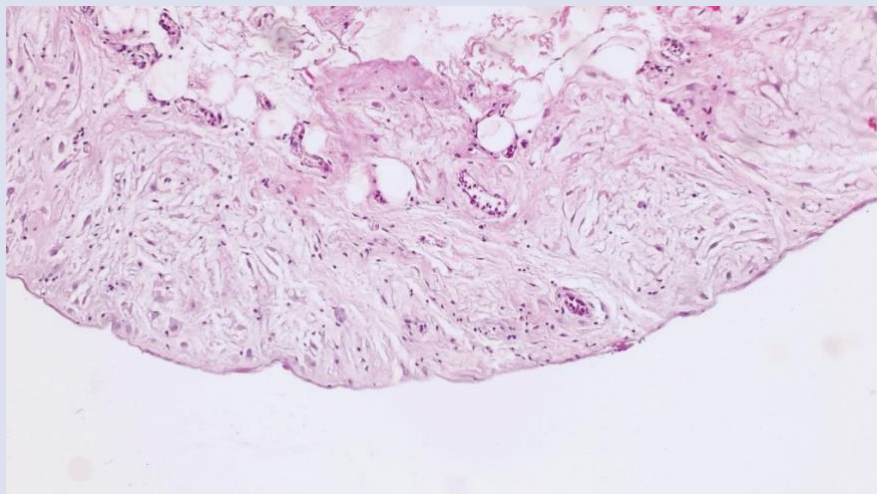


Figure 1,A. (HE X100)

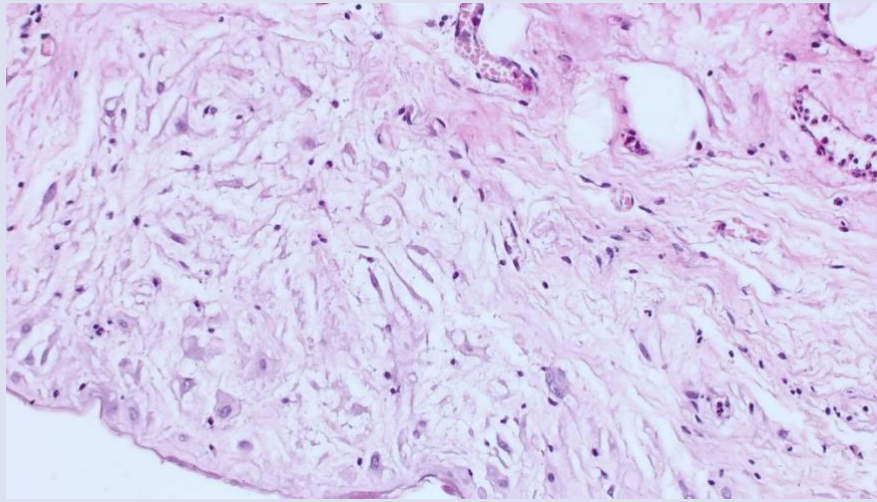


Figure 1,B. (HE X200)

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