# Peritoneal Deciduosis Presenting as Subacute Intestinal Obstruction – Case Report

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# **Abstract**

Symptomatic peritoneal deciduosis is a rare event during pregnancy and has rarely been documented in the literature. A single case of peritoneal deciduosis in pregnancy presenting as intestinal obstruction has been reported. We would like to report an additional case.

# **INTRODUCTION**

Ectopic decidua (deciduosis) has been commonly described in the ovary, cervix, uterus, bowel and appendiceal serosa, omentum, renal pelvis and para-aortic and pelvic lymph nodes. Peritoneal deciduosis, however, is a less frequent event during pregnancy and is usually asymptomatic. We present an unusual case of peritoneal deciduosis in a primigravida with features of subacute intestinal obstruction.

### **CASE REPORT**

A 25-year-old primigravida at 28 weeks' gestation presented with constipation of 1 month's duration, abdominal pain for 10 days and vomiting of 3 days' duration. X-ray and ultrasound of the abdomen showed multiple air-fluid levels suggestive of acute intestinal obstruction. The patient was taken up for emergency laparotomy. Intraoperative findings revealed a stricturous terminal ileum. The distal ileum was resected and an ileal re-anastomosis was done.

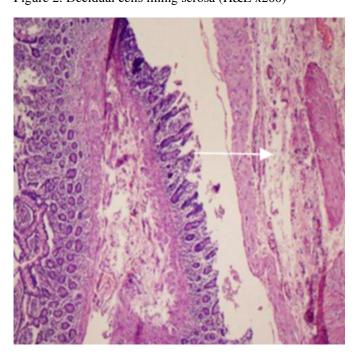
# **PATHOLOGICAL FINDINGS**

The specimen consisted of a stricturous portion of ileum received as 2 separate segments, together weighing 12g. Cut section showed an edematous mucosa with shaggy serosal surface (Fig. 1). Microscopic examination of the ileal mucosa showed focal ulceration with dense infiltration of the lamina propria by chronic inflammatory cells. The submucosa and muscular layer showed edema and congested vessels. The serosa was edematous and showed clusters of large polygonal decidual cells with abundant amphophilic cytoplasm, round-oval nucleus and prominent nucleoli surrounded by fibrous tissue (Fig. 2&3).

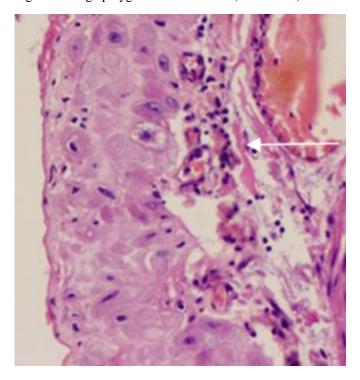
**Figure 1**: Stricturous terminal ileum



**Figure 2**Figure 2: Decidual cells lining serosa (H&E x200)



**Figure 3** Figure 3: Large polygonal decidual cells(H&E x400)



#### DISCUSSION

Ectopic deciduosis is a physiological phenomenon of pregnancy attributed to progesterone-induced metaplasia of the subserosal stromal cells.<sub>2</sub> Involution of these decidual cells takes place four to six weeks post partum.<sub>1</sub> Peritoneal deciduosis is a rare occurrence during pregnancy and is usually an asymptomatic incidental finding.<sub>2</sub> A single case of peritoneal deciduosis as a cause of mechanical ileus in pregnancy has been documented in the literature.<sub>3</sub>

Decidual cells have been commonly mistaken for metastatic adenocarcinoma, especially if they show vacuolated cytoplasm with bizarre nuclei. Decidual cells are positive for vimentin & progesterone receptors and focally positive for smooth muscle actin. Metastatic adenocarcinoma, on the other hand, is positive for cytokeratins. Another tumor to be entertained in the differential diagnosis is a deciduoid malignant mesothelioma which is positive for cytokeratin 5/6 and calretinin.<sub>2</sub>

In conclusion, symptomatic peritoneal deciduosis, though a rare event, should be considered as a differential diagnosis in cases presenting as subacute intestinal obstruction during pregnancy.

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