

## Intestinal Obstruction due to Giant Ovarian Haemangioma: Report of a Case

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### Case Report

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**Abstract:** Ovarian Haemangioma involvement in intestinal obstruction has not been reported in the literature. Stromal luteinisation in ovarian haemangioma is uncommon process and the pathogenesis is controversial. This report presents a case of Ovarian Haemangioma in a 55 year multiparous woman in association with intestinal obstruction. She was referred from a private hospital to Heritage IMS, Varanasi.

**Keywords:** Ovarian Haemangioma, intestinal obstruction.

### INTRODUCTION

Ovarian Haemangioma [1] involvement in intestinal obstruction has not been reported in the literature. Stromal luteinisation [2] in ovarian haemangioma is uncommon process and the pathogenesis is controversial. Vascular tumors [3] of female genital tract, especially those of the ovary are very rare. This is not expected as the ovary has a rich vascular supply. Ovarian hemangiomas [4, 5] are usually asymptomatic and present as incidental finding during operation or histological evaluation as in our case. Large lesions tend to present clinically with symptoms of a painful adnexal mass such as acute abdomen due to torsion or abdominal enlargement or distension because of the mass itself.

### CASE REPORT

A 55 year old woman was referred to our hospital with 2 months history of abdominal pain, persistent vomiting and generalised abdominal distension, pain was diffuse and was colicky in nature.

There was associated constipation and obstipation. The initial physical examination in our hospital showed well-nourished women with a grossly distended abdomen. There was generalised abdominal tenderness. A CT whole abdomen reported vague abdominal mass on right side of the uterus and distended bowel loops. A diagnosis of intestinal obstruction was made and a laparotomy was performed. Findings at surgery were those of right ovarian mass filling up whole of the pelvis and the small bowel loops compressed and adhered to the mass. The small bowel loops were easily separated from the mass and mass was delivered out with its stalk at the base. The pedicle was ligated and ovarian mass was excised. Postoperative course of patient was uneventful and patient was discharged after 12 days [2].

### Gross Findings

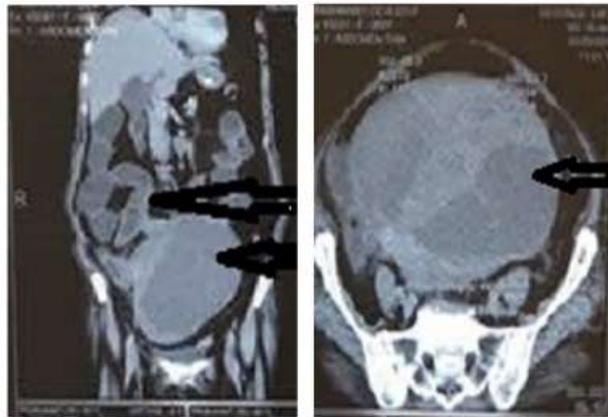
Globular mass of size 15X13X15cm, cut section showing Multicystic blood filled spaces irregular surface.

### Microscopic Findings

Section studies from large globular mass shows a well circumscribed tissue composed of numerous dilated thin walled vascular channels of variable size and configuration filled with red blood cells. They are separated by connective tissue septae. These channels are lined by a single layer of flattened epithelium without atypical features. Thrombi and areas of Haemorrhage also noted. Histopathological features consistent with



**Fig-1:** x-ray abdomen erect shows dilated small bowel loops (arrows) with multiple air fluid level suggesting of small bowel mechanical obstruction



**Fig-3 and 4:** CECT abdomen and pelvis showing large pelvic mass and dilated bowel loops (arrowed)



**Fig-4:** intra operative views showing large ovarian hemangioma(a) and dilated small bowel loops(b) Benign vascular tumor - Hemangioma

#### DISCUSSION

The etiology of ovarian hemangioma remains unknown. These lesions have been considered either hamartomatous malformations or true neoplasms in which pregnancy, other hormonal effects, or infection has been implicated. There have been some

speculations concerning the relationship between hemangiomas of ovary and the hormonal status/disorders in the literature. It has been suggested that pre-existing stromal luteinisation [8] of the ovaries may stimulate the development of ovarian hemangioma in which the inciting event seems to be

hyperestrogenism due to growth stimulatory effects of estrogen on vessels and expression of estrogenic receptors by haemangiomas. According to another hypothesis, the presence of an expansile ovarian hemangioma induces stromal luteinisation by mass effect.

Macroscopically, ovarian hemangiomas are usually small and size of the lesions has been reported from 5mm to 24 cm in greatest dimension. Grossly, enlarged ovaries with smooth glistening outer surface showing a red or purplish cut surface of a spongy texture and honeycomb appearance due to multiloculated cystic spaces filled with frank blood or serous fluid is observed. They are usually unilateral. Although they may be encountered in any part of the ovary, the medulla and hilum appear to be the most common sites. Histologically, they demonstrate either cavernous [6, 7], capillary or mixed type with cavernous type predominating, as in this case, in contrast to haemangioma in other parts of the body. While the clinical differential diagnosis of ovarian haemangioma includes tubo-ovarian mass, twisted ovarian cyst, and chocolate cyst, the main pathological differences are those of vascular proliferations, lymphangioma and monodermal teratoma composed of predominantly vascular component. However, the haemangioma usually forms a reasonably circumscribed mass or nodule composed of vascular channels, ranging from small to large sizes with a variable amount of stroma when compared with vascular proliferations, which tend to be smaller and diffuse. The presence of numerous blood cells within the vascular channels and the absence of pale eosinophilic homogenous material usually distinguish haemangioma from lymphangioma [8].

In conclusion, hemangiomas of ovary are very rare neoplasms and this causing intestinal obstruction is much rarer. These are usually detected incidentally during operation or autopsy. These tumors should be considered in differential diagnosis of hemorrhagic ovarian lesion grossly. Surgical removal of involved area is the treatment of choice.

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