

Case Report

CASE PRESENTATION: OVARIAN HEMANGIOMA

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**ABSTRACT:**

Ovarian hemangiomas are benign and rare tumors of female genital tract with less than 60 reported cases in the literature(1) Ovarian hemangioma featured as a benign rare tumor occurs among adults and children with the age ranging from infancy till octogenarian(2) Most cases of ovarian hemangiomas are small and are incidental findings at operation or autopsy(5) Large lesions tend to present clinically with symptoms typical of an adnexal mass such as abdominal pain, acute abdomen, ascites or elevated CA-125 level(5) We report a case of 27-year-old woman presenting with adnexal mass and heavy menstrual bleeding

**Keywords: Ovarian , Hemangioma**

**INTRODUCTION:**

Hemangiomas are benign overgrowth vascular cells occur in the body more often located in the skin and inner structure of organs such as liver, muscle, bone(2) Frequently this vascular proliferation histologically is classified as a cavernous form compared to the capillary one or blended type(2) Microscopically cavernous hemangioma is fashioned via proliferated vessels that are fragile due to uncial endothelial sheathed layer inflicting drip or leakage of the blood into the cavity main from time to time to peritonitis or huge ascites. This kind of hemangioma can also occur to be unfold all over the stomach cavity or involving the adnexa either. Other problems will be ovarian torsion or increased (CA)-125 and CA 19-9 tumor markers corresponding to a malignant tumor (2) Whereas, capillary Hemangioma are characterised as tiny vessels shut to every different occupying the ovary, commonly asymptomatic, now not inflicting hemorrhage in the nearer structures. It is viewed that one or two ovarian hemangiomas are non useful neoplasms. They are thinking to advance due to cyclic adjustments that ovaries bear throughout the reproductive years.(2) Hypothetically Stromal luteinization can also play a key function in vascular proliferation involving right here the hyperestrogenism or overproduction of androgens inciting the endothelial lesion. However, its pathogenesis is no longer acknowledged clear yet(2) Most instances of ovarian hemangiomas are small and are incidental findings at operation or autopsy. Large lesions have a tendency to existing clinically with

signs traditional of an adnexal mass such as belly pain, acute abdomen, ascites or improved CA-125 level(5) Case presentation- We report a case of a 27 year old woman admitted to our hospital, GMCH Nagpur, with abdominal pain and heavy menstrual bleeding since 20days. Patient was known case of hypothyroidism and sickle cell trait. Hematological and biochemical tests were within normal limits and serum tumor markers were as follows

Sr. CEA-less than 1.00

Sr.LDH-413

Sr.CA 19.9-less than 3.00

Sr.CA-125- 16

USG pelvis-well defined heterogeneously enhancing isoechoic lesion of size 6.2x5.2x5.3cm in right adnexa from which right ovary separately visualised, showing multiple dilated tortuous venous channels within, taking raised vascularity. No calcific or cystic areas within

CT scan pelvis(contrast)-well defined lobulated markedly enhancing in arterial phase, isodense lesion in thr right adnexa with extensive enhancing tortuous vascular channels emanating from it. The lesion is likely to be supplied by the right internal iliac artery and suspicious draining right gonadal vein-s/o arterio-venous malformation MRI pelvis(contrast)-Well defined altered signal intensity lesion of size 5.8x5.2x6.3cm noted in right adnexa which appears isointense on T1 and turns hyperintense on T2 and STIR sequences.This lesion shows multiple intrinsic flow void as well as tortuous dilated vessels at periphery of this lesion draining into the right iliac

vessels. On contrast administration there is intense contrast enhancement noted within the lesion with adjacent multiple peripheral vessels draining into right iliac veins. Right ovary not separately seen. Patient underwent right uterine artery embolization one day prior to surgery. Patient underwent exploratory laparotomy and a vascular tumour of 6x5x6cm size arising from right ovary seen. It had smooth, clear, glistening surface and regular margins. Cut section showed solid heterogeneous surface-solid cystic, predominantly solid. Cysts filled with hemorrhagic material. Tumour involved most of the ovary so rest of ovary could not be preserved. Patient underwent right salpingo-oophorectomy, and then the specimen was sent for histopathology. Left adnexa and uterus were normal. The post op course was uneventful. Histopathology report showed well circumscribed tumor comprising of dilated cavernous type of blood channels filled with blood as well as capillary sized blood vessels lined by a single layer of endothelial cells. The endothelial cells are uniform without any pleomorphism and mitotic activity. Stroma shows infiltration by acute inflammatory cells. Features suggestive of benign vascular neoplasm (mixed cavernous capillary hemangioma)

#### **DISCUSSION:**

Hemangioma is determined solely every so often in the ovary; the wide variety of well- documented instances does now not exceed 50. This is extremely surprising, as the ovary has a very wealthy and the complicated vasculature. Some authors have defined this on the foundation of cyclical modifications throughout reproductive period(5) Hemangioma of the ovary was once first described by using Payne in 1869(5) The etiology of ovarian hemangiomas is unknown and controversial. These lesions have been viewed both as hamatomous malformations or actual neoplasm in which pregnancy, different hormonal effects, or infections have been implicated as elements improving the boom of hemangioma (1) Differential analysis of ovarian hemangiomas encompass tubo-ovarian mass, chocolate cyst, however the important pathological differential prognosis are these of vascular proliferations, lymphangioma and mono-dermal teratoma composed of a distinguished vascular component(2) According to any other hypothesis, the presence of an expansile ovarian hemangioma induces stromal luteinization; these luteinized stromal cells produce steroid hormones, mostly androgens, which are as a result transformed to estrogens in adipose tissue, that motive unopposed estrogenic stimulation to the endometrium. The stop consequences of this phenomena might also current with postmenopausal or dysfunctional uterine bleeding, male kind hair loss and extended androgen and estradiol ranges (1) Differential diagnosis of luteinized stromal cells neighbouring hemagioma from steroid cell tumors was based on the

absence of a dense reticulin fiber pattern, intracellular lipid and lipochrome pigment.(4) The reported age of patients ranges from 4 months to 63 years and does not show predominance in any decade(5) Our case is a 27 year old female and is within the limits reported in the literature. Ovarian hemangiomas are usually discovered incidentally at operation or autopsy. Sometimes, they present with abdominal mass and/ or pain, acute abdomen(5), ascites and pleural effusion(pseudo-Meigs'), thrombocytopenia('Kasabach Merritt syndrome)(3)elevated serum CA-125 levels, simulating ovarian neoplasm.(5)

Ovarian hemangioma may additionally synchronously appear in sufferers with ovarian neoplasm such as Mature Cystic Teratoma of contralateral ovary, papillary serous carcinoma and mucinous cystadenoma as nicely as non ovarian neoplasms such as hyperplasia, polyp or carcinoma of endometrium, cervical carcinoma, tubal carcinoma or rectosigmoid carcinoma. Association of ovarian hemangioma with tamoxifen remedy for breast ductal carcinoma has additionally been mentioned (3) Timmerman and Lin have suggested that the changes occurring in the peritoneal mesothelium lead to ascites and CA-125 elevation. Kaneta et al. have reported that mesothelial cells on the surface of hemangiomatous ovarian tissue express CA-125 immunohistochemically(5) Ovarian hemangiomas have been noted in patients with generalized hemangiomatosis and in patients with hemangiomas in other parts of the genital tract.(5)

Ovarian hemangiomas are usually unilateral, though bilateral cases have been reported(1) The lesion was unilateral in our case, too and serum CA-125 levels were normal, and upon radiological examination there was a mass appearance in the left ovary. No systemic hemangiomatosis findings were detected in clinical and pathological examination

Macroscopically, the lesions are small, red or purple, round or oval nodules, measuring from a few millimeters to 11.5 cm in diameter. On cut section, they usually are spongy and show a "honeycomb" appearance. Although they have been found in different parts of the ovary, the medulla and the hilar region appear to be the most common sites.(5) In our case the lesion had a diameter of 6 cm and was occupying almost the whole ovarian tissue and contained hemorrhagic cystic structures. Microscopically, ovarian hemangioma is of the cavernous, capillary or mixed capillary- cavernous type. In contrast to vascular tumors in other parts of the body, the most common histological type in ovary is cavernous or mixed cavernous capillary type.(5) Our case had the mixed type of hemangioma. The absence of light eosinophilic secretion inside the vascular channel excluded lymphangioma in our case. Features of angiosarcoma like accelerated mitosis, cytological atypia and necrosis used to be no longer seen. The

ovary used to be absolutely processed to leave out the presence of different teratomatous component(3)

**CONCLUSION:**

In summary we report a very rare tumor of the ovary

with an unusual presentation;an ovarian mixed hemangioma with dysfunctional uterine bleeding. Patient was diagnosed and managed successfully.

