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BILATERAL OVARIAN FIBROMATOSIS WITH ASCITES - A CASE REPORT

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ABSTRACT
Ovarian fibromatosis is a very rare non neoplastic disease which may clinically mimic as a malignancy. This lesion presents as a tumor like enlargement of one or both ovaries due to a non neoplastic proliferation of collagen producing stroma. This case of bilateral ovarian fibromatosis in a 35 year old female, is documented for its rarity of the lesion and the high index of suspicion for malignancy.

INTRODUCTION

Tumor like ovarian enlargement due to a diffuse ovarian fibrosis is referred to as ovarian fibromatosis. This is a benign disorder, that differs from other pelvic lesions with fibrosis, which includes desmoid tumors, ovarian fibroma, Brenner's tumor and Krukenberg's tumor. This lesion poses a diagnostic problem as it can mimic a malignancy both clinically and radiologically.

Clinical details

A 35 year old lady, presented with pain lower abdomen for the past 3 days, which was dull aching in nature and aggravated on palpation. She gave a history of amenorrhoea for the past 2 months, with weight gain and mild abdominal distension for the past one week. She underwent treatment elsewhere with antibiotics and an aspiration was done from the pouch of Douglas. The cytology smears were reported as malignancy possibly a serous cystadenocarcinoma of the ovary. There was pain on palpation over the lower abdomen, cervix appeared healthy and uterus was anteverted. There was fullness in both the fornices and a hard palpable mass was felt. Ultrasonogram revealed both ovaries to be enlarged with multiple small cysts with free fluid in the pouch of Douglas (Fig 1). Ovarian colour Doppler study showed no vascularity in the cyst wall or septations, suggestive of benignity. Ultrasonogram showed both kidneys to be normal in size and echotexture. A hysterectomy with bilateral salpingoophectomy was done and the specimen was sent for histopathological examination. One ovary measured 8 cms and another one measured 5 cms in size. Externally both the ovaries were nodular with focal haemorrhagic areas. Cut surface was solid grey white with tiny cystic spaces .Histopathology showed an increase in stromal cellularity (Fig 2), with multiple tiny ovarian follicles trapped between the stroma (Fig 3). There were few follicular cysts with focal areas of edema and collagenisation in the ovarian stroma. A final diagnosis of ovarian fibromatosis was given. The patient was discharged with postoperative antibiotics and advised regular follow up and periodical review.

DISCUSSION

Fibromatosis is a very rare non neoplastic lesion. Due to the rarity and atypical clinical presentation, they may be misdiagnosed clinically as malignancy and subjected to unnecessary surgical intervention.

It is a tumor like enlargement of one or both ovaries due to a non neoplastic proliferation of collagen producing ovarian stroma. The patient's age ranges from 13-39 years and present with menstrual irregularities, amenorrhoea or rarely virilisation. Lutfu et al [1] reported the case of a 19 year old female who presented with menstrual irregularity, hirsutism and ascites. In yet another case, a 35 year old woman underwent exploratory laparotomy for ovarian fibromatosis with sclerosing peritonitis and endometriosis [2]. This lesion may be seen in association with ascites and pleural effusion to form part of the Meig's syndrome. The other ovarian tumors may be thecoma, cystadenoma or a granulose cell tumor. Marc Bazot et al [3] reported the imaging studies in a 25 year old woman, who presented with metrorrhagia and menstrual irregularities. Transabdominal sonography showed well defined bilateral heterogeneously echogenic masses. CT scan showed bilateral solid homogenous ovarian masses with no fat component. Grossly 80% of the cases are bilateral. Histopathology shows a proliferation of spindle shaped fibroblasts with a variable but usually large amount of collagen. Foci of luteinised stromal cells as well as edema may be present. Ovarian architecture is maintained and the fibrous proliferation surrounds follicular derivatives. Nests of sex cord type cells may be present in some cases [4]. The sex cord type nests may superficially resemble a Brenner tumor. Ovarian fibromatosis may be distinguished from a fibroma which usually appears in old age groups, is typically non functioning and it almost never contains follicles or their derivatives. Fibromatosis also differs from ovarian edema in that the latter is massive and fibrous proliferation is not observed [5]. It differs from stromal hyperplasia in that the latter does not produce abundant collagen and is usually unilateral. The prognosis of the lesion is good and it does not spread beyond the ovaries.

Figure 1. Ultrasonogram showing both ovaries to be enlarged with multiple small cysts with free fluid in the pouch of Douglas

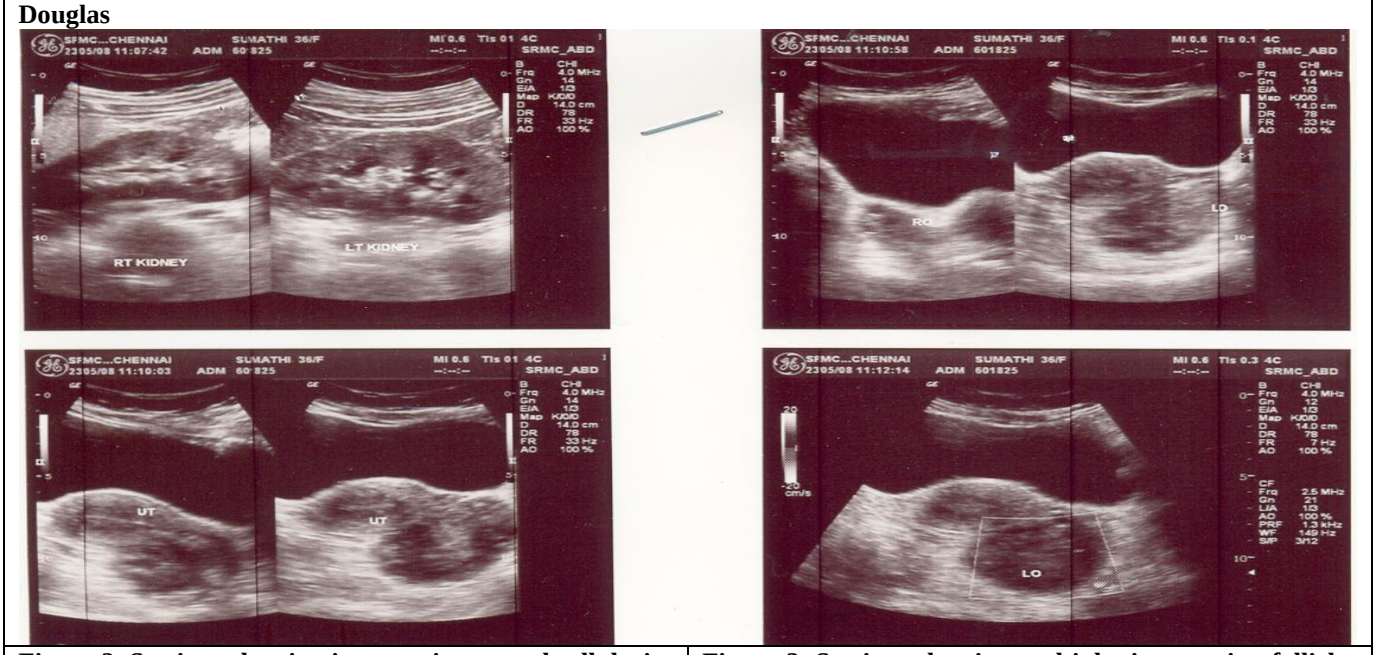


Figure 2. Sections showing increase in stromal cellularity (H&E X200)

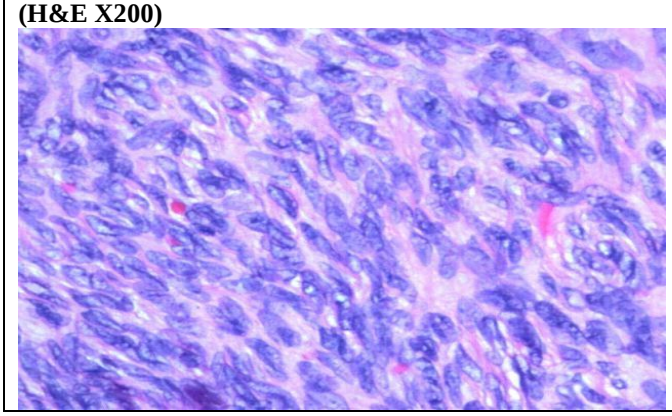
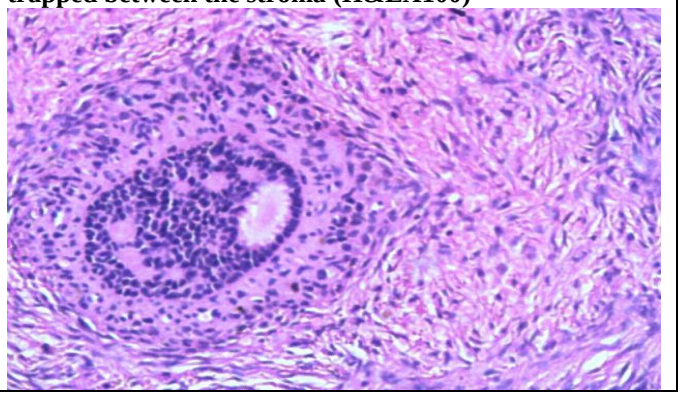


Figure 3. Sections showing multiple tiny ovarian follicles trapped between the stroma (H&EX100)



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