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OVARIAN FIBROMAS: A DIAGNOSTIC CONUNDRUM: A CASE STUDY AND LITERATURE ANALYSIS

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ABSTRACT Ovarian fibroma is a benign neoplasm that falls within the category of pure stromal tumors. These tumors along with sclerosing stromal tumor, thecoma, Leydig cell tumor, and steroid cell tumor are all members of the family of sex cord-stromal tumors which also includes mixed sex cord-stromal tumors. Because ovarian fibroma/fibrothecoma patients may or may not be symptomatic, mostly the ailment is frequently discovered incidently during normal medical check-up. Ovarian fibromas can occasionally present with Meigs syndrome, which is a condition that combines the symptoms of pleural effusion, ascites, and ovarian fibroma. However, ovarian fibroma with normal CA-125 levels are rarest of rare. We present a case of post-menopausal female who presented with complains of pain abdomen and mass with normal CA-125 level.

KEYWORDS : Ovarian fibroma, post-menopausal, hysterectomy, salpingo-oophorectomy

INTRODUCTION:

Ovarian fibromas are solid tumors made up of substantial amounts of collagen and spindle-shaped fibroblastic cells. They are classified as sex-cord stromal cell tumors of the ovary. Representing 1-4 percent of all ovarian tumors, they are the most prevalent benign solid tumors. Due to the solid appearance of the mass on clinical examination and the ultrasound similarities between the two anomalies, ovarian fibroma is sometimes difficult to diagnose preoperatively and frequently misinterpreted as uterine myoma. These masses range in size from microscopic to enormous and are rarely bilateral. While they are rarely diagnosed before the age of thirty, they can affect people of any age; on average, they are diagnosed in the latter part of the fifth decade of life. Prepubescent age groups are rarely affected [1-3]. Large ovarian fibromas can cause ascites in approximately 10–15% of cases because they allow a significant volume of fluid to escape from the oedematous surface. Moreover, Meigs syndrome, which is characterized by the trisomy of a benign ovarian tumor, ascites, and pleural effusion (typically unilateral and right sided), might manifest in 1% of cases of ovarian fibromas. Patients may have additional symptoms like bloating, shortness of breath, and distension of the abdomen in such circumstances. [4-6].

The serum level of CA125 is elevated in a small percentage of ovarian fibroma patients, which might lead to an incorrect diagnosis of a malignant ovarian tumor [7]. The usual course of treatment for ovarian fibroma involves intraoperative frozen section after surgical tumor removal. Total abdominal hysterectomy (TAH) with bilateral salpingo-oophorectomy (BSO) is the preferred course of treatment for all postmenopausal women and those who have had children; however, because the disease is benign, young premenopausal women may consider a fertility-preserving procedure called a unilateral salpingo-oophorectomy [8,9].

CASE REPORT:

A 69 years menopausal old female presented to surgical OPD with complains of pain abdomen (which was gradual in onset, dull, localized to lower abdomen, non-progressive and relieved spontaneously, no aggravating or associated factors). Patient also complains of occasional feeling of heaviness in lower abdomen since last 2 months. There was no history of nausea/vomiting, fever, burning micturition constipation/diarrhoea, or similar complains in past. Patient had no other comorbidity or any surgical history.

On abdominal examination; 2 separate non tender, ill defined, uniformly firm in consistency masses were palpable in right (approx. 9x7cm) and left iliac region (approx. 10x8cm) respectively. Per-vaginal examination revealed small pedunculated cervical polyp. USG abdomen was done suggestive of solid hypoechoic mass of 8.8x7.5x5cm in right iliac region and 9.3x8.5x8.2cm posterior to uterus pushing uterus anteriorly? Lipomatous masses.

Gynae opinion was taken where she was advised MRI abdomen and pelvis to further evaluate origin and nature of masses. MRI abdomen was suggestive of relatively well-defined heterogenous space occupying lesion measuring 13x8.2x10cm in pelvis displacing the uterine body towards right side and is indenting upon its left posterolateral wall, however appears separate from it. MRI pelvis with dynamic contrast shows large, well defined smoothly marginated and oval shaped mass in the pelvis anterior to uterus and superior to urinary bladder measuring 13.2 x10x 8.9cm. Another similar mass identified in the right iliac fossa medial to caecum measuring 9.7 x7.2x6.2cm in size. PET CT showed non to faint hypermetabolic soft mass in pelvic (10.4 x 9.7x 115 cm). Her CA-125 levels were also within normal limit.

Since none of the radiological tests verified the origin of masses, patient was planned for exploratory laparotomy along with gynae team for excision of masses. Intra-operatively 2 large whitish ovoid, calcified masses were visualised of 12x8x7cm and 8x6x3cm arising from left and right ovary respectively. Total abdominal hysterectomy with bilateral salpingo-ophorectomy was done along with cervical polypectomy. Excised specimen was sent for histopathological examination which later revealed ovarian fibromas with endocervical polyp.

Post-operatively patient recovered well and is on regular

follow up.

DISCUSSION:

Fibromas are rarest benign tumors originating from gonadal-stromal cells that originate from the ovarian cortex's connective tissue. 1–4.7 % of all ovarian cancers are caused by them [10, 11]. Although it is said that these endocrine-inert tumors are rarely bilateral, our patient presented with bilateral growths. It has been found that the later half of the fifth decade of life is the average age group for ovarian fibroma [12]. In our case, patient had symptoms, and a palpable lump. According to reported series in the literature, up to 50% of cases may not have a perceptible mass.

There has been literature reporting a 37–40% incidence of ascites with big ovarian fibroma [13]. However, our patient didn't had ascitis. A wide range of sonographic results are noted, the most frequent of which is the presence of a solid-cystic mass. According to Stephenson and Lang, fibrothecoma is known to present with echogenic mass with posterior shadowing.

Ovarian fibromas can often be associated with elevated serum levels of CA-125; nevertheless, these levels do eventually decrease following tumor excision.

Treatment for ovarian fibroma has always involved surgery. Surgical treatment consisting of a frozen section performed during the procedure after the tumor is removed has therapeutically significant as a conservative strategy for young women to maintain the vital reproductive function [8, 9].

CONCLUSION:

Ovarian fibromas are rather infrequent. Solid tumors called ovarian fibromas are ovarian sex-cord stromal cell tumors. The majority of postmenopausal women exhibit them. To develop a diagnosis, the current available approach still uses clinical and USG data. Determining the extent of surgery is aided by frozen sections. The current standard treatment is TAH with BSO in women going through menopause, and fertility-preserving surgery in younger individuals.

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