CASE REPORT PROF-1438

DERMOID CYST OF OVARY

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ABSTRACT... The patient was a 23 years unbooked primigravida who presented through emergency with the history of gestational amenorrhea of 12 weeks and acute pain in the left iliac fossa for the last 3 hours. Urgent ultrasound revealed viable pregnancy of 12 weeks along with a large left ovarian cyst of heterogenous echogenicity. A diagnosis of torsion of right ovarian cyst was made and immediate laparotomy was done after counseling of the family and preparing the patient. Per-operatively, it was found that left ovarian cyst had undergone torsion. Histopathology confirmed the diagnosis of dermoid cyst.

Key words: Dermoid cyst, Torsion, ovarian Cysts, Laparotomy.

INTRODUCTION

A dermoid, or mature teratoma, is a benign type of ovarian tumor. Dermoids are common, constituting about one-third of all benign ovarian tumors. They are often found in young women. Dermoids rarely become cancerous. Cancer occurs in only 1-2 percent of cases, usually in women over 40. There is a similar tumor called an immature teratoma that is cancerous but rare (accounting for 1 percent of all ovarian cancers). In roughly 10 percent of cases of dermoids, these cysts will be found in both ovaries.

Dermoids often cause no symptoms and are noted as an enlargement of the ovary on a routine pelvic exam. However, they may twist on themselves and cause severe pain, and occasionally they rupture, producing peritonitis, or irritation of the abdominal and pelvic cavity. In order to prevent these complications, it is best to remove dermoids when they are found. The surgery will involve removing the dermoid itself; unless it involves the entire ovary, the rest of the ovary is left behind. The surgeon may use either laparoscopy (surgery using miniature tools through tiny incisions) or an open approach, depending on the size and location of the dermoid as well as the surgeon's skill. We present a case report in which the patient presented at 12 weeks of gestation with torsion of left dermoid cyst. Management involved immediate laparotomy with uneventful recovery and pregnancy continued smoothly.

CASE REPORT

The patient was a 28 years old lady who was married for the last six months. She was sure of her dates with a regular menstrual cycle. According to her last menstrual period, she was 12 weeks pregnant at the time of presentation. She gave history of acute pain in the left iliac fossa of 3 hours duration. Pain was sudden in onset ,sharp in character, of severe intensity with no radiation of shifting. It had no specific aggravating or relieving factors. It was also associated with nausea and vomiting.

There was no history of fever, vaginal bleeding or vaginal discharge. No urinary or bowel complaints were present.

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Her past medical and surgical and family history was unremarkable. There were no known drug allergies.

On examination, she was a young anxious looking female in distress. Her vital signs were within normal limits. Abdominal examination revealed marked tenderness, guarding and rigidity in the lower half of abdomen especially on the left side. There was no visceromegaly. Gut sounds were present.

Per-speculum revealed normal vagina with no vaginal discharge or bleeding. Cervix was normal looking . On Bimanual examination, cervical os was closed , uterus was 12 weeks size. There was marked tenderness and fullness in left adnexa.

A clinical diagnosis of torsion of left ovarian cyst was made. All baseline investigations were sent. Urgent pelvic ultrasound was requested. It showed a single alive intrauterine pregnancy of 12 weeks. A 12 x 14 cms left Ovarian cyst was present having heterogenous echogenecity. A few solid areas were also visible in the cyst. Rest of the scan was unremarkable.Thus, the clinical diagnosis of twisted ovarian cyst was confirmed.

The patient and her family were counseled about the whole situation. The risks to mother and the fetus were explained. Laparotmy was planned after all necessary preparations. A midline incision was made. Per-operatively, a large 10 x 12 cms left ovarian cyst was present. It was partly solid and partly cystic. Capsule was blue in colour and blood was oozing from the surface of the cyst. Left ovarian Cystectomy was done. Remaining ovary was reconstructed. Complete haemostasis was secured. Abdomen was closed in reverse order.

Cut section of the cyst yield large amount of sebaceous material along with hair strands and few teeth. Cyst wall was partly necrosed and congested (Fig 1).

So a diagnosis was of Twisted Dermoid Cyst. Her post-operative period was smooth and uneventful. She was discharged in a satisfactory condition on 4th post-op day.

Histopathology also confirmed the diagnosis of Dermoid cyst. She was followed up regularly during the rest of her antenatal period. Her pregnancy went smoothly. She delivered a full term, alive male baby at 39 completed weeks of gestation.

Fig-1. Cut Section of Ovarian cyst showing sebaceous material and hair strands.

DISCUSSION

A cystic teratoma or Dermoid Cyst consists of a thick leather like capsule that covers amorphous fatty masses and poorly to fully differentiated structures derived from the ectoderm. Most ovarian dermoid cysts contain skin and skin adnexa, including prominent sebaceous glands, hairs, and nails, but also teeth or eyes. Dermoid cysts may occur at any age but the prime age of detection is in the childbearing years. The average age is 30. Up to 10-15% of women with ovarian teratomas have them in both ovaries. Dermoid cysts can range in size from a centimeter (less than a half inch) up to 45 cm (about 17 inches) in diameter.

The association of dermoid cysts with pregnancy has been increasingly reported. An adnexal mass may be discovered in pregnancy in 1 in 160 to 1 in 1300 women[1,2]. Persistent large tumours are removed to rule out malignancy, avoid possibility of torsion, rupture or infection during pregnancy and also to avoid obstruction during labour.

The traditional and historic teaching in obstetrics has been that any adnexal mass more than 5 cm in diameter diagnosed in pregnancy should be removed[3]. Ovarian dermoid cysts <6 cm are not expected to grow during pregnancy or to cause complications in pregnancy and labor[4]. These cysyts usually present the dilemma of weighing the risks of surgery and anesthesia versus the risks of untreated adnexal mass. Most references state that it is more feasible to treat dermoid cysts of the ovaries discovered during pregnancy if they grow beyond 6 cm in diameter. This is usually performed through laparotomy or very carefully through laparoscopy and should preferably be done in the second trimester[5]. Laparoscopic management of a voluminous adnexal mass may be safely performed during advanced pregnancy[6].

Torsion (twisting) of the ovary by the cyst is an emergency and calls for urgent surgery. It is the fifth-most-common gynecological emergency, with a reported incidence of 3%.

Two large studies[7,8] found no increase in the risk of congenital malformation and stillbirths among women operated on during pregnancy. However, one of these studies found an increased risk of spontaneous abortion (risk ratio 2.0) among women subjected to general anaesthesia and gynaecologic surgery during the first and second trimester[7]. The other study, which analysed 5405 cases from three Swedish health care registries, found that for women subjected to surgery during pregnancy, the risk of delivery before 37 weeks was 7.5% compared with the expected risk of 5.1%[8]. The authors could not determine what roles anaesthesia, the surgery or the disorders that necessitated surgery played in the adverse outcome. The incidence of prematurity and intrauterine growth restriction were reported to be higher in the surgical group too.

However, Emergency surgery may offer the possibility of avoiding the ablation of functional ovarian tissue. Early detection and prompt management can preserve fertility and ovarian function.

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