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Case Report

A case of ovarian cyst torsion causing intestinal obstruction

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ABSTRACT

Small bowel obstruction is a common surgical emergency. The common cause includes adhesions, malignancies and hernias which presents with abdominal pain. Small bowel obstruction needs to be evaluated and the cause should be found. Once the cause is established, appropriate management is to be carried out after initial resuscitation. Small bowel obstruction can be rarely managed conservatively. Ovarian cysts are commonly found in women. Most of them do not cause symptoms and resolve over one to two months with conservative management. Ovarian torsion refers to complete or partial rotation of adnexal supporting organ with ischemia. It can affect females of all ages. The most common symptom of ovarian torsion is acute onset of pelvic pain followed by nausea and vomiting. It can lead to gangrene of the ovarian cyst if left untreated. Once ovarian torsion is suspected and confirmed, surgery is the mainstay of treatment. Here we report a case of ovarian torsion presenting as intestinal obstruction.

Keywords: Abdominal pain, Ovarian cyst, Torsion, Intestinal obstruction

INTRODUCTION

Ovarian torsion commonly occurs in reproductive age group, more on the right side (60%) and often presents with acute lower abdominal pain lasting for few hours upto 24 hrs, accounting for 2.7% of acute gynaecological conditions.[1] It is an emergency condition requiring immediate surgery. Most patients presents with lower abdominal pain with severe fever, vomiting. In some cases patients may have no specific symptoms leading to delay in diagnosis and dilemma for the gynaecologists. Prevalence of ovarian torsion in post menopausal women is 17%.[2] Here we present a rare case of ovarian cyst torsion.

CASE REPORT

A 48 year old post menopausal female presented to the emergency department with complaints of abdominal distension, abdominal pain and obstipation for three days. She also had history of vomiting which was bilious and non projectile. She has past history of puerperal sterilisation done before 16 years. She has no other co morbidities. On examination she is well built with pulse rate of 110 beats per minute and her blood pressure was normal. She has distended abdomen with diffuse tenderness more in right iliac fossa and suprapubic region and an ill defined mass is palpable in the suprapubic region. There was no guarding or rigidity. Bowel sounds were absent. Digital rectal examination revealed a collapsed rectum with no fecal staining. Per vaginal examination revealed right forniceal fullness. She had an ultrasound report (done 15 days back) of ovarian cyst which was evaluated and found to be benign and planned for elective surgery which was delayed due to acute rise of COVID-19 cases in our area. X-ray abdomen erect showed dilated bowel loops. Primary resuscitation done. Routine blood investigations revealed elevated leucocyte counts of about 19000 cells/mm.[3] All other blood parameters were normal. And hence proceeded with contrast enhanced computed tomography of the abdomen which revealed an ovarian cyst of size 12x10x8 cm with

no septations and wall thickness of 1cm. It also showed dilated ileal and jejunal loops of about 4.2 cm.

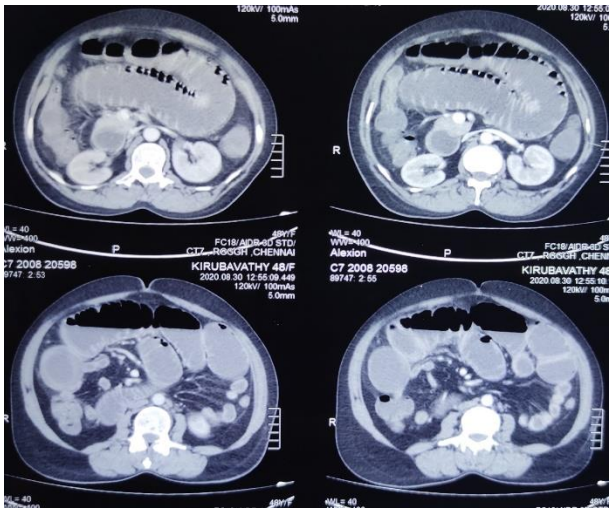

Figure 1: CECT showing dilated jejunal and proximal ileal loops.

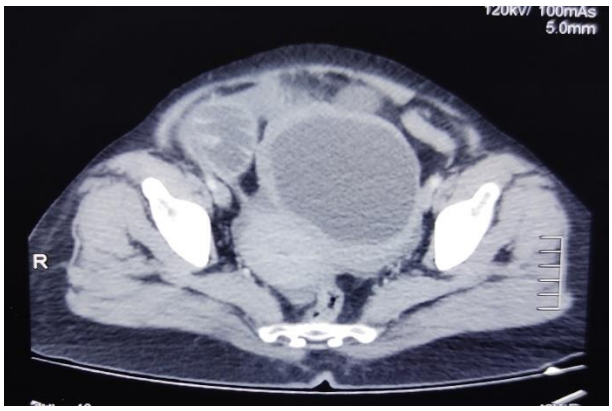

Figure 2: CECT showing ovarian cyst.

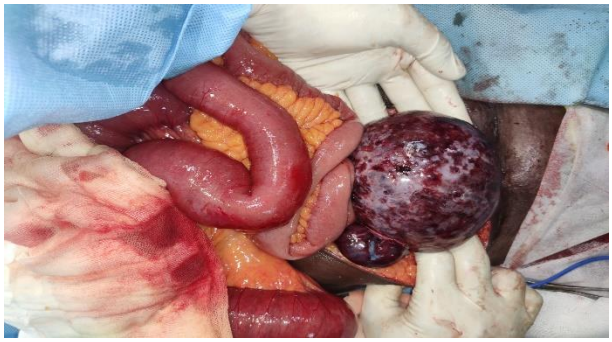

Figure 3: Intra operative picture showing torsion ovarian cyst.

Hence proceeded with emergency laparotomy with the cause to be uncertain. Intra operative findings include right ovarian cyst due to torsion of approximately the same size adherent to proximal ileum about 110 cm from duodeno jejunal flexure causing obstruction.

The sigmoid colon was also adherent to the cyst. Adhesions were released and the bowel appeared normal with minor serosal tears. Left ovary was normal. The uterus was congested.

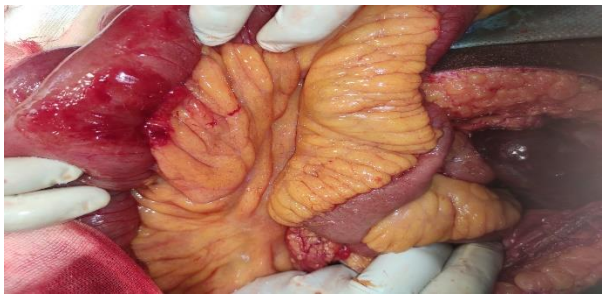

Figure 4: Intra-operative picture showing the region of proximal ileum adherent to cyst.

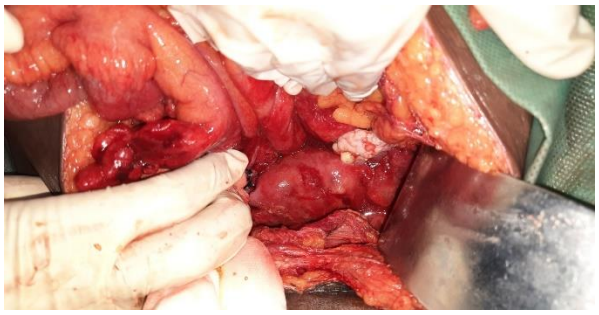

Figure 5: Intraoperative picture showing normal left ovary along with congested uterus.

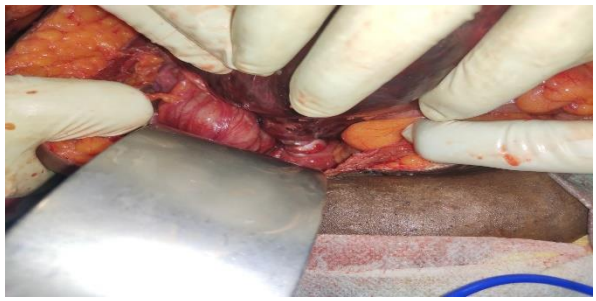

Figure 6: Intraoperative picture showing ovarian cyst twisted four times along its pedicle.

The cyst along with ovary was removed and sent for histo-pathological examination. Post operative ileus settled on the second post operative day and oral feeding was started on the third post operative day. Patient was discharged on the fifth post operative day. Histo-pathological examination revealed simple ovarian cyst.

DISCUSSION

Simple ovarian cyst are the most common non neoplastic adnexal masses among women of reproductive age. It is now known that cyst producing capabilities of ovary do not cease with menopause.[3] Cyst with diameter greater than 10cm can cause abdominal pain, bleeding and lump.

These cysts also have increased malignancy risk. The incidence of post menopausal asymptomatic ovarian cyst varies between 3% and 18%.[4] Ovarian torsion occurs when an ovarian cyst or mass presents and rotates both the infundibulopelvic ligament and the utero ovarian ligament. The cyst or mass is usually a benign lesion over 5 cm in diameter.[5]

The most common cause of small bowel obstruction in adults are adhesions, bands, malignancies and hernias.[6] Clinical presentation of pain, vomiting, distension, constipation, laboratory and radiographic factors should all be considered in making a decision about treatment of bowel obstruction. The diagnosis in most cases will be confirmed by further imaging studies such as ultrasonography, contrast studies are most commonly in contemporary practice; the computed tomography.[7] Supportive treatment must be begun as soon as possible with intravenous crystalloids, anti emetics and bowel rest. Nasogastric suction can be diagnostically and therapeutically useful. Foleys catheter must be inserted to monitor patient's urine output.[8] Malignancies and abdominal lump can cause compression of the small bowel leading to obstruction. CT has proved useful in characterising small bowel obstruction from extrinsic causes, intrinsic causes, intra luminal causes.[9] Two mechanisms of intestinal obstruction due to an ovarian mass has been proposed: first, the mass may cause torsion due to adhesions that may rarely cause intestinal obstruction and second, a giant mass may cause compression[10]. In this case, we have found out that obstruction of proximal ileum is due to torsion of the ovarian cyst that caused adhesions.

CONCLUSION

In current case emergency laparotomy was preceded in view of acute small bowel obstruction with an unknown pre operative diagnosis. So we conclude that, in women admitted in emergency department with symptoms of acute small bowel obstruction, pathology due to ovarian cyst and its complications should always be considered. If malignancy in the ovarian cyst is suspected all the precautions must be taken before proceeding with surgery.

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