RESEARCH ARTICLE

RUPTURED IMMATURE TERATOMA OF OVARY, AN UNUSUAL PRESENTATION; A CASE REPORT.

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Manuscript Info

Abstract

Teratomas are a histological subgroup of germ cell tumors, originating from primordial germ cell. Ovarian teratomas represent 15% to 20% of ovarian germ cell tumors. Mature cystic teratomas account for 10–20% of all ovarian neoplasms and are the most common in patients younger than 20 years of age, but malignant version is an uncommon tumor comprising less than 1% of teratomas of the ovary. The immature form was first described in 1960 by Thürlbeck and Scully, and can be pure or mixed with a mature component. Spontaneous rupture of the teratoma is rare and has been occasionally reported. We report a case of a five year old female child who presented with 4 days history of abdominal pain with few episodes of vomiting and constipation. Patient was initially managed conservatively as worm colic, but was later decided to undergo laparotomy in view of non resolution of symptoms and development of tachycardia and fever. In a planned laparotomy, hemoperitoneum was noted and a fleshy ruptured mass studded with lot of clots was seen arising from right ovary. The opposite ovary, peritoneum, bowel surface and other visceras where grossly normal. The cyst was excised by transfixing and dividing its broad stalk and sent for histopathology. Hemoperitoneum washed and abdomen was closed back after putting in a drain. Intestinal ascariasis though common in endemic areas often adds to the diagnostic dilemma but is not always responsible for most cases of acute abdomen.

Case Report:-
A 5 year old female child was referred to our Department of General Surgery from a peripheral hospital with 4 days history of progressively increasing abdominal pain with multiple episodes of vomiting and constipation of 2 days. There was no history of any previous abdominal surgery, or any significant medical history. Physical examination revealed pulse rate of 110 per minute and soft abdominal distension with a palpable lump in right lower periumblical region. Blood investigations revealed Anemia (Hb. 7.5mg/dl). X-ray abdomen showed few air fluid levels in Rt. Lower quadrant of Abdomen with “Cigarette Ash Appearance” strongly suggestive of Intestinal ascariasis. USG Abdomen revealed free fluid in peritoneal cavity, with interloop fluid with Intestinal Ascariasis and a heterogeneous echoic mass like lesion noted in RIF. Ours being an endemic area for intestinal ascariasis, a diagnosis of intestinal ascariasis with worm bolus obstruction was made. However, in view of increasing pulse rate and increased lower abdominal distension and signs of peritonitis patient was taken for laparotomy with an impression of complicated worm obstruction. On laparotomy, hemoperitoneum was noted along with a ruptured fleshy solid mass approx. 10 ×
10 cms. arising from right ovary having adhesions with the parietal wall and right fallopian tube Fig1.1. The surface of the mass being studded with clots. Left ovary and tubes were normal. Peritoneum and solid viscera were grossly normal. Small bowel from Duodenojejunal flexure to Ileoecalc region was normal except for the presence of multiple worms within gut lumen. The mass was excised after transfixing, ligating and dividing its stalk. Hemoperitoneum was washed. Drain was kept in and abdomen closed back. Histopathology examination of the mass revealed Grade II Immature Teratoma of Ovary. Fig1.2

Fig. 1.1: Showing ruptured Ovarian Teratoma (Immature) Identified during Laparotomy.

Fig 1.2: Histopathological examination showing Immature cartilage and neural elements.

Discussion:-
The word “teratoma” is derived from Greek work “teraton” meaning monster. It was initially used by Virchow in 1863. The term “dermoid cyst” was coined by Leblanc in 1831. Both are used interchangeably. Arising from totipotential cells, these tumours are midline or paraxial. After sacrococcygeal teratomas (57%), gonads (29%) are the second most common site. Mature cystic teratomas are 10–20% of all ovarian neoplasms; mostly occur in patients less than 20 years of age. Complications of ovarian teratoma include torsion, rupture, infection, and malignant change.

Spontaneous rupture of the cyst is extremely rare because of its thick wall and is reported in 0.3% to 0.7% of cases. The cyst can rupture into the peritoneal cavity or rarely into a hollow abdominal organ. The reported sites are
urinary bladder, small bowel rectum, sigmoid colon, and vagina. Von-Walter and Nelken reported a benign cystic ovarian teratoma with a fistula into the small and large bowel.

Our patient was having an Immature Teratoma ovary ruptured into peritoneal cavity. Because of the age of our patient (5 years) and rare incidence of Immature Ovarian Teratoma (<1 %) and also the patient being from an endemic area of Intestinal ascariasis with clinical presentation and investigations suggestive of Intestinal Ascariasis with features of small bowel obstruction, there was a stronger suspicion of Worm obstruction than a ruptured Ovarian teratoma.

**Conclusion:**
Rupture is a very rare presentation of an Ovarian Teratoma, and in endemic areas of Intestinal ascariasis there is even more diagnostic dilemma when this condition occurs in very young children with concomitant heavy Intestinal ascariasis. Though intestinal ascariasis is very common in endemic areas, symptomatic /complicated intestinal ascariasis should be considered only after ruling out other causes of acute abdomen. Our case highlights this common diagnostic mistake. Also, rupture of immature teratoma though considered rare is a possibility in young children suggesting need for prompt treatment once diagnosed.

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