

A Rare Case Report on Hematosalpinx with Torsion of Fallopian Tube in an Adolescent Virgin Girl

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Abstract: *Hydrosalpinx and Hematosalpinx are common in sexually active female but seen very rarely in adolescent virgin girls having no previous history of any pelvic surgery. Here, we present a case of hematosalpinx with torsion in a 15 years old virgin girl presented as acute abdomen, has normal menstrual cycle and had no previous pelvic surgery. Ultrasound revealed right ovarian cyst with free fluid level so, resuscitated, emergency laparotomy done and found a twisted hematosalpinx of right side. Although relatively rare, but surgeon should also kept this in mind while encountering an adolescent girl with acute abdomen.*

Keywords: Hydrosalpinx, Hematosalpinx, PID

1. Introduction

Hematosalpinx is the collection of blood into the fallopian tube [1]. And torsion of fallopian tube is a relatively rare clinical entity. There are various predisposing factors that can result into accumulation of secretion from tubal epithelium or retrograde menstrual flow into the tubes after occlusion of both the ends of the tube. Pelvic infections, previous pelvic surgeries may lead to inflammation of tubes resulting in occlusion of the ends and may lead to torsion of tube due to adhesions and scarring of fimbriated end [1,2,3]. Cryptomenorrhea is one of the most important cause in young girls that lead to hematocolpos, hematometra and then hematosalpinx [1]. Other causes may be tubal ectopic pregnancy, endometriosis and rarely primary tubal cancer. We have encountered a rare case of hematosalpinx associated with the torsion of tube in a 15 year old adolescent virgin girl who had no predisposing factors.

2. Case Report

A 15 years old Indian adolescent unmarried nulliparous girl came to emergency with severe acute abdominal pain in right iliac region and vomiting since 3-4 hours. She had noted mild intermittent pain at the same region since 2-3 months with no association with her menses. Her menses began at the age of 11 and then used to occur in every 30-40 days for a period of 4-5 days with mild to moderate pain on 1st day, sometimes requiring analgesics, with average flow and passage of small clots sometimes. There was no history of any surgical intervention.

On general examination, she was average built, conscious, oriented, afebrile with mild pallor.

An abdominal examination showed tenderness and guarding in right iliac and hypogastric region and a cystic, vague, mobile lump of approximately 8*6cm felt. Pelvic examination revealed intact hymen with no other significant findings. Urine pregnancy test was negative. She was resuscitated with fluids, analgesic and antispasmodic. Ultrasonography was done, which shows a right unilateral smooth surfaces cyst of 8*6*6 cm with a flat-fluid level.

Laboratory investigations shows her hematological parameters and routine urine examination within normal limit. Only WBC count was slightly raised, i.e., 13,600/microliters. These findings led to the diagnosis of ovarian cyst with torsion on the right side, so she was taken for emergency laparotomy.

Under spinal anesthesia, abdomen opened by suprapubic transverse incision. The distal end of the right fallopian tube was found greatly distended and twisted 2.5 times in an anticlockwise direction. Fimbria can be seen beautifully as a flower over the distended tube. The ovary was also necrosed, but the proximal portion of tube and opposite adnexa with uterus were normal. So, the diseased portion of the right tube with ipsilateral ovary was excised after counselling her parents regarding her future reproductive potential. Hemostasis secured, abdomen closed in layers and specimen sent for Histopathological examination. Her postoperative hospital stay was uneventful. Histopathology report showed grossly cystic dilated tube and cut section shows collection of blood clot inside the tube with areas of hemorrhage on wall. Microscopic examination showed large areas of hemorrhage, congested vessels, ulceration of tubal wall mucosa and ischemic necrosis.



Figure 1: Right sided hematosalpinx with torsion of pedicle by 2.5 turns.



Figure 2: Hematosalpinx with damaged ovary after detorsion of 8*7cm

3. Discussion

In an adolescent girl with acute abdomen, tubal pregnancy should be ruled out. Torsion of ovarian cyst or its rupture in cases with hemoperitoneum should also keep in mind apart from other surgical causes. Hematosalpinx is usually seen in cases of ectopic pregnancy, cryptomenorrhea, pelvic inflammatory, endometriosis, prior pelvic surgeries, tubal carcinoma [2]. Some old studies shows serous borderline tumor of tubes presented as hematosalpinx and rarely observed after medical termination of pregnancy with mifepristone and misoprostol [2].

Torsion of tubes can occur in cases of hydrosalpinx hampering the circulation, rupture of veins and can lead to hematosalpinx. A hydrosalpinx with a tubal torsion requiring surgery is quite rare and its pathogenesis is also not fully understood in literature [3].

In our case, as she is a virgin adolescent girl and has no past pelvic surgery or cryptomenorrhea or PID, so cause cannot be determine, but can be due to torsion of a pre-existing hydrosalpinx. Its diagnosis is very difficult and it's challenging to differentiate a hematosalpinx from an ovarian cyst by ultrasonography as in our case.

Acute abdomen is always an emergency and need to be diagnose soon and decision must be taken early regarding the surgery. Laparotomy or Laparoscopy should be decided according to the surgeons skill, centre facility and patients preference.

4. Conclusion

Although, it is rare in an adolescent virgin female but a gynecologist and surgeon must consider twisted hydrosalpinx or hematosalpinx if she present with acute abdomen after ruling out ectopic pregnancy. But its diagnosis is quite challenging preoperatively. Thus, guardian should be informed about the possibility of salpingectomy, hence causing some loss in reproductive potential.

References

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