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Hydrosalpinx with Adhesion Colic: A Case Report

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ABSTRACT

Hydrosalpinx is a state where one or both of the fallopian tubes gets obstructed due to accumulation of fluid. This gives the fallopian tube a sausage like shape. In certain cases, the fluid gets filled with pus known as pyosalpinx and in some cases filled with blood called hematosalpinx. The incidence of hydrosalpinx is assessed as 1 in 500,000 women. It is often found in women of reproductive age but also found rarely in prepubertal and perimenopausal women. Hydrosalpinx arises from a past infection in the fallopian tubes, sometimes due to any sexually transmitted infections like chlamydial infections. Also, previous surgery of the reproductive system, severe pelvic adhesions, pelvic inflammatory disease, endometriosis, appendicitis can also increase the risk for hydrosalpinx. In the beginning stages, it is usually asymptomatic but sometimes may cause moderate to severe abdominal pain in the women. Diagnosis can be done by using hysterosalpingogram (HSG), ultrasound, Computed Tomography (CT) or Magnetic resonance imaging (MRI) scan. Differential diagnosis of hydrosalpinx is very important in woman of child bearing age as it can result in infertility. Even in women who underwent tubal ligation, it can cause complications like tubal ligation, adhesion colic etc. presenting as abdominal pain. Therefore, despite being a rare condition timely diagnosis and treatment of hydrosalpinx is deemed important. In this case, a 30-year-old married woman was admitted to hospital with severe pain in lower right quadrant of abdomen and later diagnosed as a case of bilateral hydrosalpinx with adhesion colic and underwent successful laparoscopic salpingectomy.

Keywords
Adhesion colic; Fallopian tube; Hydrosalpinx; Salpingotomy

Introduction

Hydrosalpinx is a state where one or both the fallopian tube(s) gets obstructed due to the accumulation of fluid. Hydrosalpinx is the culprit of 25–30% of all female infertility, and the prevalence is about 30% in women with tubal pathology (Tsiami et al,2016). Etiology includes past infection in the fallopian tubes, occasionally from a a sexually transmitted infection. Other causes include previous surgery on the fallopian tube, Pelvic Inflammatory Disease, pelvic adhesions, endometriosis and appendicitis (Osuga et al., 2008).

Mostly an asymptomatic condition, hydrosalpinx sometimes cause abdominal or pelvic pain in certain women. Some women also have abnormal vaginal discharge. Diagnosis includes viewing the obstructed fallopian tube(s) using an x ray technique called hysterosalpingogram (HSG), ultrasound, CT or MRI scan. It is very important to consider hydrosalpinx in differential diagnosis of a female patient presenting with pelvic or abdominal pain. Differential diagnosis includes para ovarian cyst, bowel obstruction, perineural cyst, cystic ovarian neoplasm, dilated pelvic veins (Shah et al., 2019).

Salpingectomy is the surgical removal of one (unilateral) or both (bilateral) fallopian tubes. Recent studies strongly support laparoscopic salpingectomy in the management of hydrosalpinx. However, laparoscopy remains an invasive procedure, which, in the presence of dense adhesions, maybe very difficult. With laparoscopy, there are risks of damage to major organs or vessels, such as those with previous abdominal-pelvic surgery, severe endometriosis and inflammatory bowel disease (NG Bonnie et al; 2019). We report the case of a 30-year-old woman admitted to hospital with complaints of hydrosalpinx and associated adhesion colic.

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Case report

A 30-year-old married woman presents to the hospital with complaints of severe abdominal pain in the lower right quadrant for last four days. She has a history of appendectomy which was performed 8 years back. She has three daughters delivered vaginally and tubectomy was done 10 years back. She is also a known case of hypothyroidism since last 7 years and is on Tablet Levothyroxine 50 mcg 1-0-0. Her allergy history showed hypersensitivity to ciprofloxacin, metronidazole and ranitidine.

From emergency she was transferred to general surgery ward. Her CT scan of whole abdomen and pelvis were taken and the report revealed she had mild tethering and angulation at one of the distal ileal loops at right iliac fossa suggestive of adhesions, no major wall thickening, proximal dilation or obstruction seen at small bowel, with bilateral hydrosalpinx at adnexa.

She was having increased total and differential leukocyte count suggestive of a possible infection. Therefore, she was given antibiotic therapy (Injection Ceftriaxone 500mg and Metronidazole 500mg BD) and after 7 days of her admission, the patient underwent successful laparoscopic salpingectomy with adhesiolysis, confirming bilateral hydrosalpinx with adhesion colic as shown in figure 1.

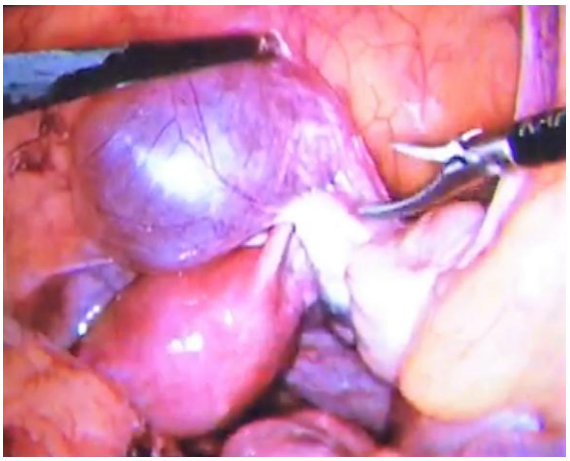

Figure 1: Laparoscopic salpingectomy with adhesiolysis revealing Hydrosalpinx

Discussions

Hydrosalpinx is abnormal occlusion of fluids in the fallopian tube. Hydrosalpinx may be unilateral or bilateral depending on the cause. Unilateral hydrosalpinx may result in occlusion of a fallopian tube mostly due to pelvic adhesion or prior surgery, whereas bilateral hydrosalpinx may result from pelvic infection with complete occlusion of both the fallopian tubes (Benjaminov,2004).

The diagnosis of hydrosalpinx can be confirmed by performing abdominal sonography and abdominal CT scan. The colour Doppler imaging is also a useful tool in differentiating hydrosalpinx and ovarian pathologies (Zalel et al., 2000). The hydrosalpinx sometimes may be misdiagnosed by many other ovarian abnormalities, such as tubo-ovarian abscess and cystic masses.

The management of hydrosalpinx is mainly based on the age, reproductive status and presence or absence of the pelvic organs. The treatment is primarily surgery that involves salpingectomy, which is the complete removal of the fallopian tube or salpingostomy, where an opening in the fallopian tube is created and the fluid is drained out (Aboulghar,2002). In the case of pyosalpinx, where you can see fluid filled with pus in fallopian tubes, the treatment involves administration of antibiotics (Burke,2007).

Conclusion

The diagnosis of pelvic or abdominal pain in women should always consider hydrosalpinx as an etiology. This will prevent the development of complications likes adhesions which makes the surgery more difficult to tackle. The

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sonography and CT scan play a major role in the detection of hydrosalpinx. In this case, the CT scan report was used to find the obstruction in the fallopian tube and fluid accumulation. The early and proper diagnosis and appropriate management of the hydrosalpinx helps to reduce the length of hospital stay of the patient and also prevent further complications.

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