

## Case Report

# Isolated torsion of Hydrosalpinx- a rare presentation

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### Abstract

Isolated torsion of the hydrosalpinx is a rare cause of acute pelvic pain. Preoperative diagnosis is very difficult because of nonspecific clinical presentation, laboratory characteristic, and nonspecific imaging findings. Definitive diagnosis is always made at surgical exploration either by laparotomy or laparoscopy, performed for adnexal Torsion. This report describes two cases.

Case one: An 18 year old unmarried girl was admitted with acute pelvic pain.

Case two: A forty year old woman was admitted with pelvic pain associated with nausea and vomiting.

The clinical and imaging features led to a suspicion of ovarian neoplasm. Surgical exploration has revealed twisted left hydrosalpinx in case one and bilateral hydrosalpinx with twisted right hydrosalpinx which developed hematosalpinx in second case. Differential diagnosis between adnexal and tubal torsion is very difficult. However both should be managed by surgical exploration which allows proper diagnosis and definitive management. This is an era of minimal invasive surgery. The aim of reporting these cases is that in a setup where endoscopy facilities are available, we can do diagnostic laparoscopy and removal of such isolated benign lesions in same sitting ,avoiding laparotomy .

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### Introduction

Torsion of the fallopian tube is a rare cause of acute pelvic pain which has never been diagnosed preoperatively. Its incidence is one in 1,500,000 (1). Diagnosis is very difficult due to its nonspecific presentation, no specific laboratory test, and nonspecific imaging report. Being aware of this complication, a clinician can suspect it preoperatively which can make precocious diagnosis and which can allow more conservative management.

### Case Report:

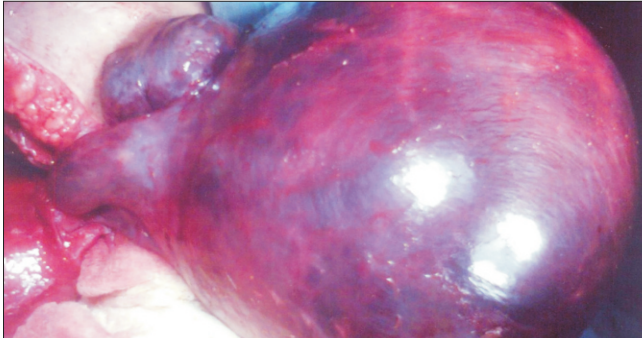
**Case 1:** An 18 year old unmarried girl was admitted with complaints of severe pain in lower abdomen since 6 hours. There was history of similar pain 9 days back which was relieved by analgesics. There was no complaint of nausea and vomiting. Her bowel and bladder habits were normal with no significant medical or surgical illness in past. Her menstrual cycles were normal, with last menstrual period 6 days back. On examination she was afebrile, pulse was 118/min and BP

110/70 mm of Hg. Per abdomen examination showed a suprapubic mass arising from pelvis with tenderness present. Per rectal examination revealed a firm, tender mass 3 cm X 5 cm palpable anteriorly. Clinical diagnosis was twisted ovarian cyst. Her routine blood investigations were normal. Ultrasonography showed a cystic lesion in left adnexa and left ovary was not visualized. Uterus and right ovary were normal. Decision of laparotomy was made with provisional diagnosis of twisted ovarian cyst. Intraoperative findings were – uterus, both ovaries, right fallopian tube normal. On left side there was twisted hydrosalpinx. Left sided salpingectomy was done. The postoperative period was uneventful, and she was discharged on 7th postoperative day. Histopathology report was consistent with hydrosalpinx.

**Case 2:** A 40 year old woman was admitted with complaints of pain right side lower abdomen associated with nausea and vomiting since one day. There were no other significant complaints. Her premenstrual cycles were normal. Her last menstrual period was normal 15 days back. She was G3P2A1; last child birth was 13 yrs back. Puerperal tubectomy was done. On examination she was afebrile, pulse 84/min, BP 130/90 mm of Hg. On per abdomen examination there was no definite mass palpable. There was pain in right suprapubic region. On per vaginal examination the uterus was normal in size and a firm mass 6.5 cmX 5.5 cm was palpable through right fornices; tenderness was present. A mass of 5 cm X 4 cm was palpable through left fornices; there was no tenderness. Her routine blood investigations were normal. CA125 level was less than 4units/ml. Ultrasonography report showed a heterogeneous well defined anechoic lesion of size 7.8 cm X 4.7 cm X 4.7 cm on left side and 5 cm X10.1 cm X 4.2 cm on right side of uterus. The right side lesion shows small solid component within it. Impression: Benign bilateral cystic ovarian lesion,? Intramural degenerated fibroid. Clinical

### Case 1- Hydrosalpinx



**Case 2- Hematosalpinx**

diagnosis of bilateral complex ovarian cyst was made. Laparotomy was performed. Intraoperative findings were – Uterus and both ovaries were normal. Right side there was twisted hematosalpinx 7 cm X 3.5 cm. Left side hydrosalpinx 5 cm X 3 cm. Bilateral salpingectomy was done. Postoperative period was uneventful. Histopathology report was consistent with hydrosalpinx. Patient was discharged on 8th postoperative day.

**Discussion:**

Isolated torsion of the fallopian tube is a rare event that usually occurs in reproductive age group, and rarely in adolescent and postmenopausal women. Anatomically, fallopian tube can be divided to two portions – the proximal (intramural segment and isthmus) is fixed to the uterus and has little mobility; the distal portion (ampulla and infundibulum) has a large mobility and is in close relation with ovary. Fallopian tube and ovary constitute a real functional and anatomical unit so that isolated torsion of one of them is rarely reported and adnexal torsion occurs more frequently (2). Many risk factors for isolated tubal torsion have been reported. Shukla (3) has proposed etiologic classification for fallopian tube torsion as –

- a. anatomical abnormalities (long mesosalpinx, tubal abnormalities, hematosalpinx, hydrotid of Morgagni).
- b. physiological abnormalities (abnormal peristalsis or hyper motility of tube, tubal spasm and intestinal peristalsis).
- c. hemodynamic abnormalities (venous congestion in the mesosalpinx).

- d. Sellheim theory (sudden body position changes).
- e. trauma, previous surgery or disease (tubal ligation, pelvic inflammatory Disease).
- f. gravid uterus.

Many reports indicate that torsion of the fallopian tube is more common on the right side rather than on the left. This may be due to the presence of sigmoid colon on the left side or to the slow venous flow on the right side, which may result in congestion. It is similar to case two, but in case one twisted hydrosalpinx was on the left, and in an 18 year old unmarried girl which is a rare presentation of a rare entity. Hydrosalpinx is a common long term result of pelvic inflammatory disease. The majority of hydrosalpinx are not complicated by torsion because of the high frequency of pelvic adhesions which limit the pelvic organ mobility and prevent torsion. The differential diagnosis of fallopian tube torsion includes acute appendicitis, ectopic pregnancy, pelvic inflammatory disease, twisted ovarian cyst and degenerative leiomyoma (3).

Based on this experience as well as other similar reported cases, isolated torsion of the fallopian tube should be considered in the differential diagnosis of acute lower abdominal or pelvic pain, so that prompt surgical intervention can be done either by laparotomy or laparoscopy (4,5). The aim of reporting these cases is that in a setup where endoscopy facilities are available, we can do diagnostic laparoscopy and removal of such isolated benign lesions in the same sitting, avoiding laparotomy.

**References:**

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