

## BILATERAL PYOSALPINX IN AN UNMARRIED AFGHAN LADY

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### ABSTRACT

Pyosalpinx leading to blocked tubes is a very common sequel of pelvic inflammatory disease, both acute and chronic stage.

A rare case of bilateral huge pyosalpinx in an unmarried girl is presented, where no obvious cause could be found. Laparotomy was done based on ultrasound diagnosis of bilateral adnexal cyst. At laparotomy, bilateral large retort shaped Fallopian tubes were visualized. Probing the abdominal ostia drained almost one liter of sterile yellow creamy material from each tube. Patient was put on anti-tuberculosis therapy and sent home with advice for monthly follow-up.

**Key words:** Pelvic Inflammatory Disease; Tuberculosis, Female Genital; Infertility, Female; Sexually Transmitted Diseases.

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### INTRODUCTION

Infertility is a very common problem in Khyber Pakhtunkhwa (KP) province of Pakistan; almost every one in three patients in outdoor clinic of Rehman Medical Institute (RMI) is suffering from infertility, either primary or secondary type. Since more than 60% of the RMI clientage is from Afghanistan, where tuberculosis is very common, so most common risk factors in these cases are Pelvic Inflammatory Disease (PID) and pelvic tuberculosis,<sup>1</sup> while in developed countries the most common cause of PID is Sexually Transmitted Diseases (STD),<sup>2</sup> and the main causative organisms are Chlamydia trachomatis and Gonococcal infection.<sup>3</sup>

The reason for presenting this case is that the patient is unmarried and it took the best efforts to find the cause of her ascending genital tract infection.

### Case Report

Miss XYZ, a 21 years old unmarried girl was admitted through Outpatients Department (OPD)

as a case of acute abdomen, because her presenting complaint was abdominal pain for the last one week, which was aggravated since last 04 days. Pain was severe and colicky in nature, not associated with nausea, vomiting, fever or weight loss.

She was admitted in Kabul hospital but had no improvement of her symptom so she was referred to Rehman Medical Institute (RMI) for further management.

She gave history of irregular and heavy menstrual flow with dysmenorrhea and dysuria. Her mother is hypertensive, father is diabetic and elder sister had pulmonary tuberculosis 5 years back and had taken complete Anti Tuberculosis Therapy (ATT).

On admission her vitals were normal; she looked pale. Her lab reports are shown in Table 1.

**Table 1: Hematology report data of patient.**

#	Investigation	Results
1.	Hemoglobin	8.6gm/L
2.	WBC	11.94 x 10 <sup>9</sup> /L
3.	MCV	58.9
4.	MCH	15.2pg
5.	MCHC	28.5gm

In addition, the blood film showed microcytic hypochromic anemia, her ESR was raised and the C-reactive protein was at more than normal levels. All other baseline investigations were normal. Sonologist gave a report of bilateral adnexal cyst. Exploratory laparotomy was done.

### Operative Findings

Exploratory Laparotomy was done under general anesthesia. Uterus and both ovaries were normal looking and normal size. Both ovaries were adherent with the posterior uterine surface. Adhesiolysis was done. Both fallopian tubes were enlarged, retort shape and distended with pus. The abdominal ostium at the fimbrial end was blind

(Figures 1a & 1b). Probing was done, followed by draining of almost one liter of sterile yellow / creamy type material from each tube. The walls of the tubes were very much thickened. There was no ascites; the rest of the pelvic viscera were normal looking and there were no obvious signs of tuberculosis. Peritoneal lavage was done, drain was kept in and abdomen closed. Pus was sent for Culture & Sensitivity (CS) as well for Acid Fast Bacilli (AFB) culture.



**Figures 1a & 1b: Operative findings**

Her postoperative period was uneventful. Blood transfusion for anemia was given postoperatively. She was discharged on third post-operative day.

#### **Pus Culture Reports**

Though initial reports of pus culture did not reveal any growth at 48 hours, after 6 weeks of incubation, growth of *Mycobacterium tuberculosis* was reported by the RMI Pathology laboratory.

## **DISCUSSION**

Pelvic inflammatory disease is an infectious and inflammatory disorder of upper female genital tract including, uterus, fallopian tubes and adjacent pelvic structures.

Infection and inflammation may spread to the upper abdomen, including perihepatic structures (Fitz-Hugh-Curtis syndrome).<sup>4,5</sup>

The classic high risk patient is a menstruating woman younger than 25 years who has multiple sex partners and lives in an area with high prevalence of sexually transmitted disease.<sup>6</sup>

Causative organisms are:<sup>6</sup>

- Chlamydia trachomatis
- Neisseria gonorrhoea
- Trichomonas vaginalis
- Mixed bacterial infections in 30-40% of PID cases are polymicrobial.

Diagnosis of PID is based on history and clinical findings.<sup>7</sup> The most common presenting complaint is lower abdominal pain (as in this case), which may be acute or chronic in nature. Others have abdominal vaginal discharge.

Differential diagnosis includes:

1. Appendicitis
2. Cervicitis
3. UTI
4. Endometriosis
5. Adnexal tumors
6. Ectopic pregnancy

#### **Complications**

PID may cause tubo-ovarian abscess and may progress to peritonitis and Fitz-Hugh-Curtis Syndrome. Subclinical form of PID or late diagnosis and treatment may cause tubal infertility.

#### **Treatment**

Empirical antibiotic treatment is recommended for patients with PID leading to Salpingitis and to tubo-ovarian mass.<sup>8</sup>

According to guidelines from Centers for Disease Control and Prevention (CDC), antibiotic regimen for PID<sup>9</sup> must be effective against C-Trachomatis and N-Gonorrhoea as well against gram-negative organism, anaerobes and streptococci because culture of the pus collected during surgery have polymicrobial infection in as many as 30-40% of the cases. Most cases of tubo-ovarian mass (60-80%) resolve with broad spectrum antibiotics; in non-responders, abscess drainage is required.<sup>10, 11</sup>

Surgical treatment involve unilateral salpingo-oophorectomy or hysterectomy according to age and parity.<sup>11</sup>

## Prevention

Improved education, routine screening, timely diagnosis and empirical treatment should reduce the incidence, prevalence and development of long term sequelae like pyosalpax, infertility etc. Women with PID should be counseled to abstain from sexual activity or use barrier protection.

The Royal College of Obstetricians & Gynecologists (RCOG), UK, recommends treating women with PID who are also infected with HIV, with the same antibiotic regimen used to treat women who are HIV negative.<sup>12</sup>

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