

CASE REPORT

GENITAL TUBERCULOSIS PRESENTING AS PRIMARY AMENORRHEA

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ABSTRACT: Incidence of Extrapulmonary TB (EPTB) is increasing in young women throughout the world. We report a case of young woman apparently having no signs & symptoms of Tuberculosis. **CASE REPORT:** 18 years young female patient was referred to us as a case of Primary Amenorrhea. She had Normal secondary sexual characters & normal Breast Development (Tanner staging of Breast-IV.) She had negative Progesterone Challenge Test (PCT). Estrogen & Progesterone Challenge Test was negative. Diagnosis of End Organ Problem was done. Diagnosis of Genital Tuberculosis was confirmed by hysterolaparoscopy. She was given AKT for six months.

DISCUSSION: Hysterolaparoscopy is important investigation in a case of Primary Amenorrhea with negative Estrogen & Progesterone Challenge Test. Tuberculosis with its varied presentation can present as primary amenorrhea in young unmarried female.

KEYWORDS: primary amenorrhea, extra-pulmonary tuberculosis, synechia.

CASE REPORT: Case is about an 18 years old teenage girl, daughter in a family of three kids. Her aunt had history of pulmonary tuberculosis 5 yrs back and had taken complete treatment. The patient consulted for isolated primary amenorrhea. The age of puberty of her parents was normal and there were no similar cases or genetic disease in the family. She was vaccinated according to the national immunization program. She comes from a normal pregnancy and the delivery was natural with normal weight. Physical examination found a patient with a female morphotype, weighing 50kg for a height of 5 feet. The stage of pubertal maturation corresponded to Tanner stage 4. There were no signs of hyperandrogenism.

The patient was a virgin and the rectal examination allowed detecting the uterus through the rectovaginal septum. The hymen appeared intact. Local examination allowed verifying the existence of the vagina. The rest of the clinical examination was normal. Trans-abdominal pelvic ultrasound showed a normal size uterus with atrophic endometrium, both adnexae showed complex ovarian masses. Hormonal balance including Follicle Stimulating Hormone (FSH), luteinizing hormone (LH), Thyroid Stimulating Hormone (TSH), prolactin and β -Hcg was normal.

The diagnosis of genital tuberculosis was strongly suspected. Chest-X-Rays and urinary tests looking for pulmonary and urinary location of tuberculosis were normal. Biological check-up found a normal sedimentation rate, renal function and blood count were normal.

After informing the patient and her parents, decision of diagnostic hysterolaparoscopy was made.

LAPAROSCOPY FINDINGS: Uterus normal in size. Both tubes congested, edematous adherent to the ovaries and to posterior surface of uterus. Omentum and intestinal adhesions present in POD and lateral parietal wall. Adhesions were released. Perihepatic adhesions were present. Tuboovarian masses were filled with caeseous material.

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Hysteroscopy showed uterine synechia in entire cavity.

Histological study confirmed the diagnosis of genital tuberculosis by finding an epithelioid granuloma with giant cells with caseous necrosis. Culture for mycobacteria showed a Mycobacterium Tuberculosis.

The Patient Received Anti Bacillary Treatment: 2RHZE/4RH; the first two months: Rifampicin, Isoniazid, Pyrazinamide and Ethambutol followed by Isoniazid and Rifampicin for 4 months with good clinical tolerance. The evolution was marked by weight gain, increased appetite but patient did not get menses. She was informed about the poor prognosis of fertility and the usually irreversible uterine synechia.

Fig. 1: Left tube showing congestion and edema and caeseous material.



Fig. 1

Fig. 2: Laparoscopic findings showing right Tubo-ovarian mass.



Fig. 2

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Fig. 3: Laparoscopic findings showing perihepatic adhesions (Fitz Hugh Curtis Syndrome).



Fig. 3

DISCUSSION: Primary Amenorrhea is defined as: 1) No periods by age 14 in the absence of growth or development of secondary sexual characteristics. 2) No periods by age 16 regardless of the presence of normal growth & development with the appearance of secondary sexual characteristics.¹

Incidence of primary amenorrhea in gynecological practice is less than 5%.²

Incidence of primary amenorrhea due to genital TB is 2.5%.³

Although pulmonary TB is the primary and the most common presentation of tuberculosis in India, there is a significant number of cases of extra-pulmonary TB reported annually. Genital tuberculosis of women is part of extra pulmonary forms of tuberculosis. The diagnostic dilemma arises because of the varied clinical presentation of the disease confounded by diverse results on imaging, laparoscopy, histopathology and a mixed bag of bacteriological and serological tests, each of which has its limitation in diagnostic sensitivity and specificity.

Apart from varied clinical presentation, a past history of tuberculosis or a history of contact may not be forthcoming and an evidence of tuberculous lesion elsewhere may be lacking. The abdominal and vaginal examinations may be normal. It can have no signs and symptoms. There is a very high prevalence (48%) of peri Hepatic Adhesions on laparoscopy in FGTB cases.^{4,5,6} A high erythrocyte sedimentation rate and a positive Mantoux test are non-specific. The chest skiagram is normal in most cases. A pelvic ultrasound and hystero-salpingography examinations may be of some help.⁷

Histopathological evidence in biopsy of premenstrual endometrial tissue or demonstration of tubercle bacilli in culture of menstrual blood or endocurrentings only can provide the certain diagnosis of disease. Laparoscopy should be done carefully to avoid injury to an adherent bowel loop. Certain conditions like tubo-ovarian mass (T-O mass) of gonococcal / pyogenic origin, pelvic endometriosis, small ovarian cyst and old pelvic haematocoele may closely mimic a T-O mass. Therefore, all the available diagnostic techniques should be combined judiciously and correlated

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with the clinical profile prior to instituting the anti-tuberculosis treatment (ATT). Category 1 AKT is useful.⁸

But, a prescription error or poor compliance can delay the response to treatment leading to failure, thereby resulting in continued morbidity despite the fact that good quality ATT is available under RNTCP and the results are quite encouraging. It may be mentioned that research is considerably hampered due to a non-availability of clear criteria for monitoring the treatment efficacy, unlike in pulmonary TB. Therefore, more research is needed, so that delivery of therapy can become more certain and therapeutic effects get better defined in terms of the normalization of the pathologic process and the desirable reproductive function

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