Pelvic and endometrial tuberculosis diagnosed during vaginal hysterectomy

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Background: It is indeed unusual to be confronted with cul-de-sac nodularity and exclusive pelvic/peritoneal miliary deposits at vaginal hysterectomy confounding with endometrial tuberculosis, histology suggestive of chronic granulomatous condtion as an example of genital and peritoneal tuberculosis the rarely which in seen.

Keywords: Peritoneal miliary deposits, peritoneal tuberculosis, genital tuberculosis.

Introduction

Complex combination of genital tract and pelvic peritoneal tuberculosis is rarely suspected in a women coming for elective prolapse surgery, even in the presence of suggestive history like secondary amenorrhea, pathognomic of the disease. ¹One such case will be discussed to enlighten us.

Case

A 44 years old multiapara, P6 from Darchula, a remote western hilly area of Nepal was admitted for vaginal hysterectomy for second degree uterovaginal prolapse of two years duration, corresponding to a period when menstruatation ceased (presumed to be depoamenorrhoea).

Married at the age of 19 years, she produced six children with the birth spacing ~ 18 months. All were self assisted home delivery and the last child was born 11 years back.

She had suffered from pulmonary tuberculosis and was treated for the same 15 years back before the delivery of the last child.

She was on injectile contraceptive Depo-Provera for three years which she left 7 yrs back but stopped to menstruate for the last 2 years, which could not have been Depo-Provera induced amenorrhea as is usually supposed. She was a nonsmoker.

On the preoperative assessment she confided that she had

been experiencing, continuous diffuse type of abdominal pain for the past 1½ yr but was afebrile all through. On clinical judgment diffuse basal crepitations were heard over the right lung whereas abdominopelvic/adnexal mass and ascites were absent.

Local vaginal examination confided a retroverted uterus slightly pulled to one side. Preoperative ultrasound showed a very thin endometrial lining with minimal collection in the cavity. There were small hypoechoice foci over the fundus.

During vaginal hysterectomy, Douglas pouch was felt to be nodular with miliary deposits studded all over pelvic peritoneum when effort was made to deliver the uterus anteriorly.

Rest of the procedure was accomplished in the usual manner applying three sets of serial clamps over the Machenrodts, uterine artery and fundal structures in step wise manner ligating the pedicle simultaneously.

Pelvic peritoneum was left as such without closing, placing a corrugated drain in POD Pelvic proceeding with the pelvic floor repair. The uterine specimen contained small granular deposits all over the surface and the endometrial cavity was found to be adhered which had to be separated with artery forceps, before the cavity could be opened.

Systemic antibiotic (IV metronidazole 500 gm and IV ciprofloxacin 200mg) were started intraoperatively and

continued postoperatively as 8 and 12 hourly medications, converted to oral drugs after 24 hours.

Vaginal pack and catheter kept at the end of surgery were removed on the following day. Vaginal drain was released after 48 hours of surgery. She was discharged in good condition on the 6th post operative day, on ciprofloxacin (one week course), Ibuprofen, ranitidine, vitamin B complex.

The histopathology report showed features consistent with endometrial tuberculosis at the follow up visit (fig1), with caseation necrosis surrounded by giant cells and epitheloid cells.

Discussion

In this case, the possibility of extra pulmonary genital tuberculosis completely went out of our mind even in the presence of symptoms like abdominal pain and secondary amenorrhoea with the additive findings of raised ESR (40mm) which should have raised a suspicion otherwise. It is known that 20% cases after the primary treatment do have a relapse at a later date in about 10-15 years, which we failed to link up.

Depo-provera was inappropriately blamed for the secondary amenorrhea despite the discontinuation of this contraceptive seven years ago, in considering secondary amenorrhea to be a presentation of genital tuberculosis as she was in perimenopausal age. It may be because; endometrial tuberculosis is a common diagnosis in an infertility work up which is usually present in women less than 30 years.

Tuberculosis being a disease that is well acquainted to the people in our part of the world, surgery was completed without any panic or complications even when the inter spread of pelvic peritoneal seedlings were noted for the first time.

We could both see and feel intrauterine synechae (Asherman syndrome) retaliating the findings with in text books description, tuberculosis solely being responsible for intrauterine adhesions formation and or giving rise to the surface tubercles.

The provisional diagnosis of this case was kept as post menopausal uterovaginal prolapse which was wrong as the amenorrhea was from endometrial tuberculosis, such combination has been reported in a case of uterovaginal prolapse in a postmenopausal endometrium.² Atrophic endometrium is thought to be poorly supportive to tubercle bacilli. One can speculate the invasion at a time when the endometrium could be supportive before its total destructions from these omnipresent bacilli amidst necrosed

endometrium.

Pelvic- peritoneal and the endometrial tuberculosis, unaccompanied by pelvic / tubo-ovarian masses or ascites remain under diagnosed sonologically and also histologically. In the latter situation because of the failure to demonstrate bacilli around the caseating necrosis, being described only as granuloma .³⁻⁴ In these circumstances PCR for tubercular baicilli and adenosine deaminase (ADA) test can be adopted, to establish the diagnosis.

This is one of the very rare cases of extra genital pelvic peritoneal tuberculosis with nodularity in Pouch of Douglas together with miliary peritoneal seedlings in second degree uterovaginal prolapse with histopathological features consistent with endometrial (genital) tuberculosis. While a combination either of two components, 'endometrial tuberculosis and uterine prolapse' or 'genital and extra genital tuberculosis' has been reported by Lobo.^{1,2}

In conclusion any women with the history of pulmonary tuberculosis must be investigated exclusively and treated accordingly for genital tract tuberculosis before planning non emergent surgery like this one.

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