



Case report

Non-puerperal uterine inversion with an ovarian tumor -a rare case

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1. INTRODUCTION

Adult inversion of uterus is very uncommon, more so when it is not associated with puerperium or third stage of labor. Inversion of the uterus is an unusual entity [1-6] and may be classified as puerperal/obstetric and non-puerperal/gynecologic inversion [7]. The rarest among this rare entity is a non-puerperal uterine inversion. Non-puerperal uterine inversion is often chronic, although DAS has reported 8.6% of the inversion as sudden [8]. This is a rare case with no published figures available regarding its incidence and only 101 cases reported from 1940 to till date. In this case report, a rare case of chronic uterine inversion, associated with ovarian tumor in a 35 years old woman and its successful outcome after surgery is presented.

2. CASE STUDY

A 35 year old woman P1L1 with last child birth 9 years back was admitted to our hospital on 29th October 2010, complaining of severe lower abdominal pain, mass per vagina, irregular vaginal bleeding and foul smelling vaginal discharge since 6 months. She attained menarche at 12 years of age and previous menstrual cycles were regular with last child birth 9 years back which was a full term normal delivery.

On admission her pulse was 90/min, B.P 100/80 mmHg. She was pale and febrile. On palpation abdomen was tender, local examination revealed a large incarcerated infected mass of 15 x 8 cm, firm, hemorrhagic with fragile and necrotic areas filling the vagina and protruding from introitus (Fig.1). On rectal examination uterus was not felt. Her Hb was 4.5g%, peripheral smear showed microcytic, hypochromic anemia with neutrophilic leucocytosis. USG revealed large

space occupying lesion, suprapubic mass possibly right ovarian origin. Her lipid profile, RFT, LFT, chest x-ray, ECG and CA-125 were within normal limits. Blood for culture showed no growth.

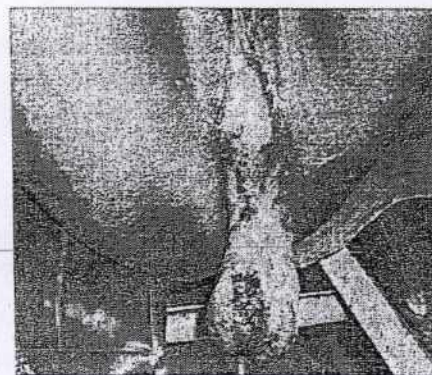


Fig.1 Hemorrhagic with fragile and necrotic areas filling the vagina and protruding from introitus

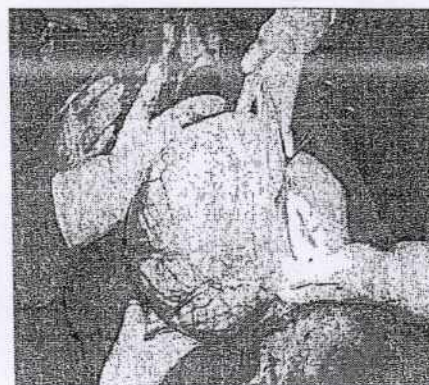


Fig.2. Cut section of the specimen shows a central canal occupied with grey white serosal folds

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Patient was posted for laprotomy after correcting her anaemic status. Under spinal anaesthesia, dorsal position, subumbilical midline incision was given and abdomen opened in layers. Inversion of uterus was confirmed by presence of cupping. Left ovarian cystic mass of 25 x 17 x 16 cm was removed after clamping, cutting and ligating the infundibulopelvic ligament (Fig.2). Right ovary was normal. Retro peritoneum was opened, internal iliac artery was traced, anterior division of it was cut and ligated on both sides. From the vaginal end, uterovesical fold was opened, the bladder was pushed up anteriorly and pouch of Douglas was opened posteriorly. Uterosacral and mackenrodt's ligament clamped, cut and ligated on both sides. Vault was closed with drain in situ. Vaginal pack kept, homeostasis maintained and abdomen was closed in layers. Post operative period was uneventful and the patient was discharged in good condition.

Histopathology revealed ovarian cyst as serous papillary cystadenoma. Multiple sections from uterus and cervix showed erosion and loss of lining mucosa with dense neutrophilic infiltration. Serosa showed congested vessels and section from mass showed features of leiomyoma.

3. DISCUSSION

The reported cause of non-puerperal uterine inversion is submucous leiomyoma with fundal attachment, uterine sarcoma and endometrial carcinoma [7-9]. In puerperium it is an emergency, while in gynecology it is a diagnostic dilemma [10].

Non-puerperal uterine inversions are uncommon with only 101 cases reported from 1940 to till date. Takano *et al* summarized 88 reported cases of non-puerperal uterine inversion. 81 of them were associated with uterine tumors of which 20% were malignant.

Symptoms associated with chronic uterine inversion are vaginal bleeding, vaginal tumor, lower abdominal pain, menorrhagia and urinary disturbances. Uterine inversion is suspected when the tumor is palpable in vagina or seen out of

introitus as seen in our case, but when uterine fundus is not palpable by pelvic or rectal examination.

The present case was a chronic non-puerperal uterine inversion due to growing submucous leiomyoma associated with ovarian tumor. This is very rare and diagnosis is often difficult. In the present case Johnson's, Spinelli, Kustner's and Haulton's technique was not attempted as the mass was incarcerated, necrotic and infected. Therefore we opted for vaginal removal of inversion, which was successful.

4. CONCLUSIONS

Non-puerperal uterine inversion is a very unusual condition that most gynecologists will never encounter and thus has to be managed based upon little or no previous experience with tumor protruding from the vagina/vulva. We must consider uterine inversion and rule out malignancy by taking pre-operative biopsy and plan the treatment appropriately [11].

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