



A rare presentation of degenerating broad ligament fibroid with pseudomeigs syndrome, pelvic organ prolapse and gross uterine displacement-A case report and review of literature

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Abstract : 41 year old , P1L1, presented with abdomen pain , abdominal distension, stress incontinence and increased urinary frequency ,for the past 6 months and was referred with diagnosis of malignant ovarian mass. Examination of abdomen revealed irregular mass of size corresponding to 28 weeks gravid uterus. Another globular mass was palpable in the right inguinal region .Examination also showed grade 2 cystocele along with grade 3 enterocele. Imaging revealed a huge heterodense mass arising from the pelvis extending upto the epigastric region , displacing bowel loops laterally and uterus towards right inguinal region. The patient had pleural effusion on left side. Serum CA 125 was 102.67 IU ml. The patient was planned for staging laparotomy along with cystocele and enterocele repair. Intraoperative finding was that uterus was normal in size , grossly deflected to right and cervix stretched out .Left ovary, Right tube and right ovary were normal. A mass of size 25 20 20 cm was present within leaves of left broad ligament distorting the course of the left ureter. The mass was removed after delineating the ureter. TAH with BSO done. Moschcowitz suture to prevent enterocele recurrence , paravaginal defect repair for cystocele and retropubic colposuspension for stress urinary incontinence were done .Histopathology of the mass showed leiomyoma with areas of cystic and myxoid degeneration . The case is reported for its rarity and the diagnostic difficulties it posed.

Keyword : fibroid, prolapse, psuedomeigs, uterine displacement, ovarian malignancy.

INTRODUCTION:

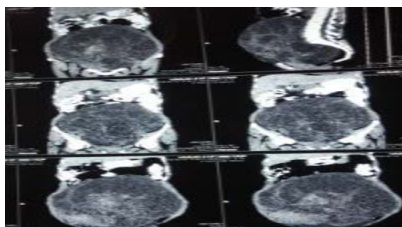
Fibroids are benign, monoclonal tumours of smooth muscle cells of the myometrium. By FIGO fibroid classification system, broad ligament fibroids along with cervical ,round ligament and parasitic fibroids are placed under Type 8, which do not have direct attachment to uterus. Among extra-uterine fibroids, broad ligament fibroids can achieve enormous size and generally present with pressure symptom like bladder and bowel dysfunction. Myxoid degeneration is a rare complication of benign fibroid, where presence of cystic changes mimics the metastatic malignant ovarian tumour.

CASE REPORT:

41 year old , P1L1, vaginal delivery , last child birth 13 years back , not sterilised, with regular menstrual cycles , last menstrual periods 15 days back presented with history of lower abdomen pain and abdominal distension for past 6 months, and mass descending per vaginum for past 3 months .she had history of easy fatiguability , loss of weight and loss of appetite. She also had increased frequency of micturition .She involuntarily dribbled while coughing and sneezing. She was referred from elsewhere with provisional diagnosis of malignant ovarian mass for further management. On examination , her general condition was fair. Abdominal examination revealed an irregular tender mass corresponding to 28 week size of gravid uterus which had variable consistency with restricted mobility .There was separate solid globular mass of size 5*4 *4 cm occupying the right iliac fossa , which was firm in consistency and mobile .Genital examination revealed grade 2 cystocele and grade 3 enterocele. Cervix showed first degree descent . Per vaginal examination showed that cervix was deflected to left with fullness present in all fornices and the uterus was not separately palpable. Movement of both the masses were not transmitted to cervix. Per rectal examination revealed same mass felt through anterior rectal wall and rectal mucosa was free. There was no inguinal or supraclavicular lymphadenopathy. The routine haematological and biochemical parameters were within normal limits .Serum CA 125 was 102.67 IU /ml (normal : 0-35)



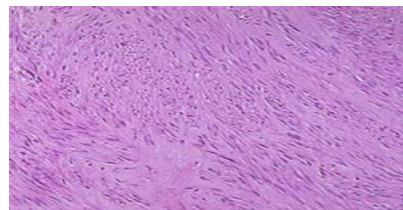
Ultrasound revealed normal echotexture of abdominal organs. Huge heteroechogenic mass 27*25*20 cm noted arising from the pelvis extending into the epigastric region , with solid components . Ovaries not imaged separately .The mass caused displacement of uterus towards right side and endometrial thickness was 8 mm. Cervix could not be visualised . CT scan of abdomen and pelvis showed a large heterodense lesion with multiple cystic areas , septations, solid areas and calcifications .The lesion pushed bowel loops laterally on both sides .Impression was complex ovarian mass for tumour marker correlation. Surgical oncologist opined as ? Borderline / ?Malignant ovarian mass with cystocele and enterocele and the patient was planned for staging laparotomy .Patient was deferred anaesthetic fitness because she was found to have left sided pleural effusion and was advised CT chest which revealed bilateral upper lobe fibrosis with left minimal pleural effusion. Left inferior lingular segment had patchy pneumonitis / subsegmental collapse. But in view of malignancy and patient started developing breathlessness because of mass, she was posted for staging laparotomy with high risk consent for postoperative elective ventilation .



Intraoperative findings : uterus was normal size , grossly displaced to right and the cervix was stretched out . Left ovary, Right tube and right ovary were normal. The mass of size 25*20*20 cm was present within leaves of left broad ligament distorting the course of left ureter. Left sided fallopian tube , round ligament and infundibulopelvic ligament were stretched out over the mass . Transverse colon was found adherent to the mass and same was dissected. Mass was removed after delineating the course of ureter. Total abdominal hysterectomy with bilateral salpingo oophorectomy, pelvic and para aortic lymphadenectomy and infracolic omentectomy done . Patient was examined vaginally peroperatively . Anterior ,posterior vaginal walls and cervix were found to be in normal positions. Hence pelvic floor repair was not attempted vaginally. Vault closed abdominally. Moschowitz suture was taken circumferentially around the cul-de-sac to prevent recurrence of enterocele or occurrence of vault prolapse. The space between the pubic bone and bladder was opened and the pubocervical fascia reattached to the arcus tendineus using methods similar to the vaginal paravaginal repair. Retropubic colposuspension called as Burch procedure, was done to treat urinary incontinence by suspending the bladder neck to nearby ligaments with sutures. Abdomen was closed in layers.



Cut section revealed fibrocollagenous tissues with cystic areas with huge amount of amber coloured mucin like fluid around 3 litres. Histopathological examination revealed normal histology of uterus , ovaries , tubes and cervix. Sections from the soft tissue mass showed features leiomyoma with cystic degeneration with areas of hyaline and myxoid degeneration. Peritoneal washings ,omentum and lymph nodes had normal histology. Patients postoperative course was uneventful. During follow up at 3 months, healthy vault visualised at normal position and ultrasound showed no evidence of pleural effusion and ascites .



DISCUSSION:

This scenario represents a case of mass abdomen clinically diagnosed to be a ovarian malignancy ,who presented along with a globular mass in right inguinal region which finally turned out to be uterus .The uterus was grossly displaced by the mass. She also presented with grade 2 cystocele with grade 3 enterocele which were caused by the mass. The patient also had left sided pleural effusion and ascites ,by which she was diagnosed to have pseudomeigs syndrome. The mass measured 5.6 kg. Ours is a case of true broad ligament fibroid with features of malignancy both clinically and radiologically, and histopathology confirmed it as a benign broad ligament fibroid(3) .Similar diagnostic difficulties were reported by Jagtap SV et al in case of giant broad ligament leiomyoma with gross displacement of uterus and with cystocele. The case was managed by panhysterectomy and enucleation of fibroid but cystocele repair was not attempted.

In our case , abdominal paravaginal repair with colposuspension was done and patient showed no pelvic organ prolapse during follow up. Pulsion type of enterocele is caused by continuous pressure by a mass in the abdomen .Additionally other prolapsed organs may put pressure on tissues contributing to enterocele. Continuous transmission of intraabdominal forces through pelvic floor causes the tissues to become lax or to tear resulting in cystoceles , rectoceles , enterocele and combination of prolapses(3). Uterine displacements generally occur in downward direction. In this case, while the uterus was displaced laterally to right inguinal region by the mass , anterior and posterior vaginal walls prolapsed through vagina , possibly because of stretching of ligaments. Cruikshank et al reported a case of large adnexal mass in which sutures in pouch of douglas were taken after hysterectomy to prevent enterocele and vault prolapse (5). In our case, Moschowitz suturing was done to prevent enterocele. Pseudo-Meigs syndrome consists of pleural effusion, ascites, and benign tumors of the ovary other than fibromas (2).Meigs suggested that irritation of the peritoneal surfaces by a hard, solid ovarian tumor could stimulate the production of peritoneal fluid. Other proposed mechanisms are direct pressure on surrounding lymphatics or vessels, hormonal stimulation, and tumor torsion . Buckshee et al reported a case of large broad ligament with huge ascites and bilateral pleural

effusion both of which resolved after enucleation of mass(4) . As in our case, the incidence of pseudo meigs is more with fibroids undergoing myxoid degeneration (1). Godbole et al reported a case of giant broad ligament fibroid with myxoid degeneration presenting like ovarian malignancy with pleural effusion . Efskind and Terada et al theorize that ascitic fluid is transferred via transdiaphragmatic lymphatic channels to cause pleural effusion. Mild elevation of CA 125 may be attributed to the degenerating fibroid. Dunn et al has reported a similar case of leiomyoma with moderate elevation of CA125. This case highlights diagnostic dilemmas in the management of mass abdomen in the field of gynaecologic oncology.

CONFLICT OF INTEREST : nil

COMPLIANCE WITH ETHICAL REQUIREMENTS : yes

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