

UNUSUAL LOCATION OF INTRAPERITONEAL FIBROMYOMA: RARITY DOES NOT RULE OUT THE DIAGNOSIS

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Abstract

Fibromyoma which is commonest benign tumor mostly arises from smooth muscles of uterus present in 20-25% women of reproductive age group. Round ligament Fibromyoma is rare tumor & exact incidence not known. It may mimic ovarian tumor when it was intra peritoneal and located in adnexa.

Preoperative diagnosis can be made by history, clinical examination, USG, CT scan of abdomen. Surgical excision is the curative treatment. A 35 years lady para 2 presented with lump in lower abdomen gradually increasing in size for 3-4 yrs and pain for 2 months. On examination firm palpable mass of 28 weeks pregnancy size. Her USG and CT scan detected well defined 28 cm x 22 cm X 20 cm mass in right adnexa & diagnosis given ovarian tumor. Her CA 125 level was 97unit/ml. Laparotomy finding was a big firm lobulated tumor arises from right round ligament. Tumor removed as a whole, uterus, both ovaries, and left sided fallopian tube healthy & preserved.

Final histopathological diagnosis benign fibromyoma with degenerative change. So diagnosis of fibromyoma always kept in mind during the differential diagnosis of any pelvic mass.

Key words

Fibromyoma; Round ligament; Ovarian tumor; Laparotomy.

Introduction

Fibromyoma of uterus are commonest benign pelvic tumor of reproductive age present in nearly 20-25% women¹. Arises from smooth muscles fibers of uterus & commonly located under serous,

interstitial & submucous layer of uterus. Risk factors are family history, nulliparity, Obesity, black race, Estrogen hormone etc¹. Extra uterine fibromyoma usually arise in the genitourinary tract (In the vulva, broad ligament, round ligament, ovaries, urethra and urinary bladder but may arise in nearly any anatomic site². There are few case report or case series with small numbers in the literature and exact incidence is not known^{2,3}. Presentation depends on location of fibroid. Occasionally arises from unusual location with unusual growth pattern makes a diagnostic dilemma. Mean age varies between 13-70 yrs and mean dimension of a tumor has a wide range from .5- 15 cm⁴. Knowledge of this unusual benign entities is essential to differentiate it from malignant tumor.

Case Report

A 35 year old lady admitted with lump in lower abdomen for 2 years, heaviness, palpable mass gradually increasing in size, occasional pain which was aggravated since 2 month. Her obstetric history Para 2, All Vaginal delivery, LCB- 10 yrs back, She has regular menstruation, no history of menorrhagia or dysmenorrhoea, had COCP for last 7 years. Medical history was unremarkable, Examination findings was not anemic, BP-120/70 mm of Hg, weight- 58 kg, Abdominal examination revealed Solid mass almost 28 weeks pregnancy size, mobility restricted, No ascites. Vaginal examination: vagina & cervix looks healthy, uterus seems bulky anteverted, could not clearly delineated, separated from mass, deviated towards left side. Blood group- B+ve, Hb%-11.4gm/dl, serum creatinine- .7mg/dl, FBS- 92mg/dL

BS-after two hours of breakfast 122mg/dL, BHCG-<1.2mIU/mL, AFP-.91ng/ml, Ca-125 value 97 units/ml, USG report was right sided ovarian tumor and CT scan- Fairly large solido cystic mass in abdomen extending from pelvis to supra umbilical region (Rt ovarian/retro peritoneal mass). So with the diagnosis of ovarian tumor laparotomy was done with vertical incision. A big round mass size about 28 cm x 22cmX 20cm, firm, solid, lobulated mass, free from adhesion,

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base originating from right side of pelvic cavity was found (Fig 1). There was flimsy adhesion with omentum. Complete removal of mass was possible (Fig 2,3). Base merge with right sided round ligament. There was another small (2 x 3cm) intramural fibromyoma in anterior wall of uterus which also enucleated (Fig 4). Both ovaries, Fallopian tubes were healthy and preserved. Round ligament of left side, pouch of doglus was normal (Fig 5,6). Specimen sent for histopathology and report was fibromyoma with degenerative change. Also demonstrated parallel and resecting fascicles of smooth muscle cells with scattered thick walled blood vessels and areas of marked hyalinization and myxoid degeneration. No evidence of mitotic activity, atypia or malignancy. Her post operative period was uneventful.



Fig 1: Big fibromyoma arising from right side of the pelvic cavity (Right round ligament).



Fig 2: Tumor removed completely.



Fig 3: Cut section of the tumor showing sign of degeneration.



Fig 4: Showing tumor base connected to round ligament of the right side.



Fig 5: Showing stitched right round ligament and another small fibroid removed from anterior wall of uterus.



Fig 6: Showing uterus, both ovaries and fallopian tubes healthy and preserved and pouch of Douglas free from adhesion.

Discussion

Tumors of round ligament is a rare entity, Fifty percent of round ligament fibromyoma present with uterine fibroid². Most commonly arises from extra peritoneal end of the round ligament and more common in right side³. The transformation of myofibromatous structure of female genital tract to fibromyoma involves somatic mutation of smooth muscle and complex interaction between sex steroids and growth factors⁴. These fibroids usually resemble an ovarian cyst, Lymphadenopathy, Inguinal hernia vulval mass etc. The majority of the round ligament fibroids are asymptomatic and with benign histology. Sometime symptomatic depends on location and size of the tumor^{5,6}.

Ozer Birge et al. reported a case of 28 years old primigravida a 28 yrs old nuligravida presented with mass in anterior vaginal wall with dyspareunia, after removal of mass histopathology proved it was a case of leiomyoma. Author concluded that leiomyoma can arise from any of the smooth muscle containing organ either spontaneously or parasitically. So clinician must think about leiomyoma as a possibility in case of smooth muscle tumor².

Harish et al reported a case of left inguinal fibromyoma in a patient who had hysterectomy done for uterine fibromyoma 18 years before. The provisional diagnosis was inguinal degenerated cystic mass but histopathological report shown benign fibroid originated from round ligament⁶.

Pawar et al. published a case of a left sided round ligament fibroid of with degenerative change which was operated with the diagnosis of ovarian mass. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was done. Histopathology revealed benign fibromyoma with hyaline and myxoid degeneration. Here author give emphasis on degenerative change can occur in any extra uterine myoma due to insufficient blood supply⁷.

In the present case patient presented with palpable mass in abdomen and also pelvic pain which may correlated with degenerative change in fibromyoma. Diagnosis was ovarian tumor.

USG and CT scan shown solid cystic mass occupying whole of the pelvis extending in abdomen up to supra umbilical region. But tumor marker for germ cell was normal. CA 125 was raised.

According to Rajanna et al case report broad ligament fibroid may associated with pseudo meigs syndrome with elevated CA 125 hence MRI plays vital role in differentiation of round ligament fibroid from ovarian tumor⁸.

Renter'ia-Ruiz et al. reported a case of histopathologically revealed meso-ectodermal leiomyoma located in the ciliary body in the right orbit, in a Mexican woman. When diagnostic workup suspected a solid mass resembling an adenoma⁹.

In this case MRI not done. After laprotomy and removal of mass which was large bosselated. It was clearly shown both ovaries and fallopian tubes were healthy, left sided round ligament intact and right sided round ligament merge in the base of the tumor and dissected. Another small fibroid in anterior wall of the uterus and myomec-tomy done. US, CT failed to identify the origin of the tumor due to broad attachment¹⁰.

Limitations

There is only one case of fibromyoma in abnormal location. If other case of abnormal location of fibromyoma may be added it will be more authentic.

Conclusion

Fibromyoma of round ligament are rare condition can be easily mistaken as malignant ovarian tumor

but they might occur in any tissue or organ containing smooth muscle spontaneously or parasitically after the spreading effect of a surgical trauma. Diagnosis can be established by surgical exploration, excision & histopathology report. Excision of the lesion provides best symptomatic relief to the patient and enables a diagnosis of the exact nature of the swelling. So diagnosis of fibromyoma always kept in mind during the differential diagnosis of any pelvic mass.

Recommendation

All the fibromyoma cases found in abnormal location in Chittagong Medical College Hospital should be preserved. So with the collected cases a case series can be prepared.

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Contribution of authors

KN - Conception, design, citing references & final approval.

SD - Drafting, critical revision & final approval.

SB - Citing references, drafting & final approval.

Disclosure

All authors declared no competing interest.

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