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Fallopian Tube Leiomyoma – A Rare Entity

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Abstract **Case Report**

Background: Leiomyomas are the most common benign tumors of the female genital tract and most frequently they arise from the smooth muscles cells of the uterus. Fallopian tube leiomyomas are extremely rare and arise from the myosalpinx or the cells of the blood vessels supplying the fallopian tubes. ***Case Report:*** A 53- year was admitted with colicky pain abdomen with recurrent uterine bleeding and cervical polyp on per vaginal examination. USG reported uterus being bulky and enlarged with complete loss of endo-myometrial differentiation – features likely suggestive of adenomyosis. With clinical diagnosis of cervical polyp and adenomyosis of uterus patient underwent panhysterectomy. Specimen of panhysterectomy and separately sent cervical fibroid were received for histopathology examination in our department of pathology in Krishna Institute of Medical Sciences, Karad. ***Discussion:*** Leiomyomas are the most common benign tumors of the female genital tract and most commonly arise from the uterus. The incidence of fallopian tube myomas are extremely rare(5) and it is difficult to evaluate their frequency of occurrence. Fallopian tube myomas arise from the mesosalpinx or the smooth muscle cells of the blood vessels supplying the tube. They are rarely diagnosed pre-operatively. Powerful USG could be helpful in diagnosing this condition, but laparoscopy can be used for definite diagnosis and management. ***Conclusion:*** Asymptomatic fallopian tube leiomyoma being chance findings are very rare and symptomatic fallopian tube leiomyoma as in this case are still rarer. This condition should be kept in mind as a differential diagnosis of any adnexal mass.

Keywords: Leiomyomas, myosalpinx, adnexal mass, Fallopian tube.

INTRODUCTION

Leiomyomas are the most common benign tumors of the female genital tract and most frequently they arise from the smooth muscles cells of the uterus. Fallopian tube leiomyomas are extremely rare and arise from the myosalpinx or the cells of the blood vessels supplying the fallopian tubes [1].

Very rarely the ovary, broad ligament and fallopian tubes can also be involved. Though the uterus and tubes are derived from Mullerian system and both contain smooth muscles, uterine myomas are very common whereas fallopian tube myomas are least frequently encountered [2].

Most cases of fallopian tube leiomyomas are asymptomatic and chance-findings at surgical exposure for other reasons or during histopathological examination [3].

Most cases of fallopian tube leiomyomas are asymptomatic and are found incidentally during unrelated surgical procedures or at autopsy; however, they have been implicated in causing tubal torsion [4].

CASE REPORT

A 53- year was admitted with colicky pain abdomen with recurrent uterine bleeding and cervical polyp on per vaginal examination. Her menstrual cycles were 5-7 days/30 days with excessive flow. P3L3A0 with uneventful post-partum period. Patient had menopause two years back and operated for tubal ligation done 10 years ago. Per vaginal examination revealed a polypoidal mass arising from cervix. Her vitals were stable, abdominal palpation revealed a tender distended lower abdomen. Patient is known case of ASD and is on anihypertensive medication. Speculum examination revealed cervical bleed and a cervical polyp.

The blood picture revealed Hb count 13.9 gram/dl and TLC 9,100/cmm. USG reported uterus being bulky and enlarged with complete loss of endo-myometrial differentiation – features likely suggestive of adenomyosis. With clinical diagnosis of cervical

polyp and adenomyosis of uterus patient underwent panhysterectomy. Specimen of panhysterectomy and separately sent cervical fibroid were received for histopathology examination in our department of pathology in Krishna Institute of Medical Sciences, Karad.

Gross Examination

One sided fallopian tube showed a paratubal cyst measuring 1 cm in diameter. Other sided fallopian tube with attached fimbriae measured 4 cm in length having grey white mass measuring 1.2 cm in maximum diameter, cut section of which was grey white and whorled.

Fig-1 & 2: Fallopian tube showing a grey white area with whorled appearance

Microscopic Examination

One sided fallopian tube appeared unremarkable and other sided fallopian tube showed Leiomyoma.

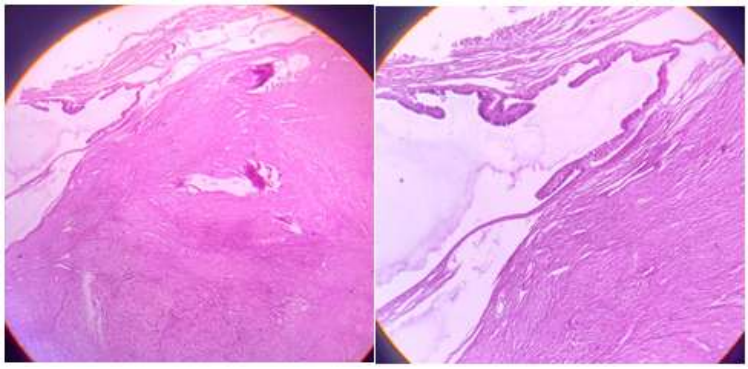

Fig-3 & 4

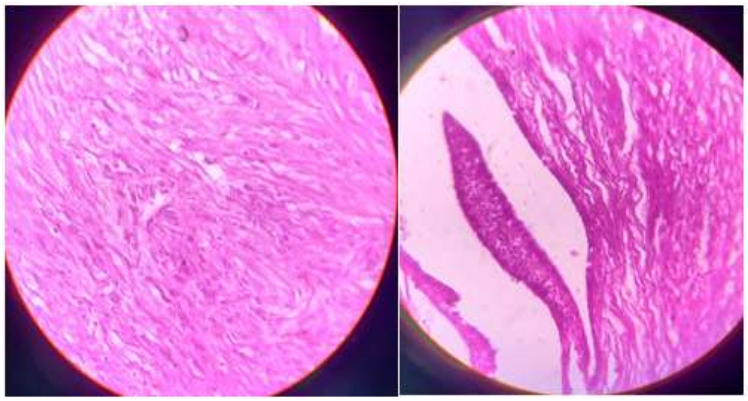

Fig-5 & 6

On microscopy section studied show lining by mucosa in the muscle coat is seen a tumor composed of smooth muscle cells arranged in interlacing fashion and whorles. Individual cells are uniform, elongated with tapered end with elongated, blunt ended nuclei (cigar shaped) with fine regular chromatin and eosinophilic cytoplasm.

DISCUSSION

Leiomyomas are the most common benign tumors of the female genital tract and most commonly arise from the uterus. The incidence of fallopian tube myomas is extremely rare [5] and it is difficult to evaluate their frequency of occurrence. Fallopian tube myomas arise from the mesosalpinx or the smooth muscle cells of the blood vessels supplying the tube [6]. Leiomyomas of the tube are generally small and located unilaterally although there are case reports of tubal myomas as large as 13 x 9 cm. The most common site of tubal leiomyomas is the isthmus followed by the ampulla, as in our patient where the leiomyoma was located. Tubal leiomyomas maybe subserous, intramural or submucous [5] and large myomas can undergo torsion or degeneration [7]. Most cases of tubal leiomyomas however are asymptomatic and are found incidentally during unrelated surgical procedures or at autopsy. Fallopian tube torsion most commonly occurs in women of reproductive age [20 - 45 years as in our patient] although it has been reported in women of all ages. Tubal torsion can occur in pregnancy due to laxity of its supporting ligaments. The site of torsion may either be the mid tubal segment or around its ligamentous supports [8].

Risk factors for fallopian tube fibroid are yet unknown given the limited number of cases published. In the published cases, patients affected were 35 years old and over. Paraclinical diagnosis of fallopian tube leiomyoma is usually difficult because of its lateral position [9].

They are rarely diagnosed pre-operatively. Powerful USG could be helpful in diagnosing this condition, but laparoscopy can be used for definite diagnosis and management [10].

CONCLUSION

Asymptomatic fallopian tube leiomyoma being chance findings are very rare and symptomatic fallopian tube leiomyoma as in this case are still rarer. This condition should be kept in mind as a differential diagnosis of any adnexal mass. Their subtle presentation often leads to delay in diagnosis and surgical intervention of this acute gynecological emergency that very often leads to salpingectomy. Early diagnostic laparoscopy especially in the event of inconclusive cause of an acute abdomen may allow the tube to be salvaged and conserve fertility.

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