Fallopian Tube Leiomyoma – A Rare Entity
Dr. Sujata. S. Kumbhar*, Dr. Abhijit Phalke, Dr. Sonam Billawaria, Dr. Shefali Mishra

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. Case Report: A 53-year-old 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 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.
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.

REFERENCES

1. Manuel SA, Alamooti Z. Fallopian Tube Leiomyoma: A Unique Cause of Fallopian Tubal Torsion and its Successful Management. EC Gynaecology. 2019; 8:587-93.
2. J of Evolution of Med and Dent Sci/ eISSN- 2278-4802, pISSN- 2278-4748/ Vol. 3/ Issue 66/Dec 01, 2014.
3. Journal of Evolution of Med and Dent Sci/ eISSN- 2278-4802, pISSN- 2278-4748/ Vol. 3/ Issue 66/Dec 01, 2014
4. Misao R, Niwa K, Iwagaki S, Shimokawa K, Tamaya T. Gynecol obstet invest. 2000; 49(4): 279-80.
5. yang CC, wen KC, chen P, Wang PH, primary leiomyoma of the fallopian tube; pre-operative ultrasound findings. J chins med Assoc. 2007; 70: 80-83.
6. Tarek Bardawil, MD, MBA. Chief Editor: Richard Scott Lucidi, MD, FACOG. http://emedicine.medscape.com/article/275463-overview#showall
7. Journal De Gynecologie Obstetrique Et Biologie De La Reproduction.2008; 37(8): 799-801.
8. Sarangthem B, Laishram S, Sharma AB, Konjengbam R, Debnath K. Primary bilateral tubal adenocarcinoma associated with uterine leiomyomas. Indian Journal of Pathology and Microbiology. 2008 Jan 1;51(1):32.
9. Habek D, Has B, Habek JC. Tuboovarian abscess mimicking intraligamentar uterine myoma and a intrauterine device: A case report. The European Journal of Contraception & Reproductive Health Care. 2005 Jan 1;10(3):168-70.
10. Tarek Bardawil, MD, MBA; Chief Editor: Richard Scott Lucidi, MD, FACOG. http://emedicine.medscape.com/article/275463-overview#showall.
11. Wen Kc, Yang CC, Wang Ph. priamry fallopian tube leiomyoma managed by laparoscopy. J minim invasive gynecol. 2005; 12: 193.