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Polypoidaladenomyosis mimicking subserosal leiomyoma – A Rare Case Report.

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ABSTRACT

Adenomyosis is defined by the presence of endometrial mucosa within the myometrium.[1]It causes significant enlargement of entire uterus but rarely adenomyosis can present as nodules.[2] We present a rare case of polypoidaladenomyosis which presented as subserosal leiomyoma. A 36 year old woman underwent hysterectomy with right salphingo oophorectomy for suspected subserosal leiomyoma and cystic right ovary. Histopathological examination of subserosal mass revealed polypoidaladenomyosis.Subserosal nodular formations of adenomyosis, mimicking leiomyoma is possible even without significant enlargement of the uterus and is a rare entity.

KEYWORDS : Adenomyosis, endometriosis, subserosal mass.

Introduction

Adenomyosis is defined by the presence of endometrial mucosa within the myometrium.[1] It causes significant enlargement of entire uterus but rarely adenomyosis can present as nodules.[2] We present a rare case of polypoidaladenomyosis which presented as subserosal leiomyoma. A 36 year old woman underwent hysterectomy with right salphingo oophorectomy for suspected subserosal leiomyoma and cystic right ovary. Histopathological examination of subserosal mass revealed polypoidaladenomyosis.Subserosal nodular formations of adenomyosis, mimicking leiomyoma is possible even without significant enlargement of the uterus and is a rare entity.

Case report

A 36 year old woman presented with menorrhagia and dysmenorrhea since 2 years. Clinical examination revealed mass in the right fornix. On Ultrasound a diagnosis of subserosal leiomyoma and cystic follicles in right ovary was made. The patient underwent laparoscopic hysterectomy with right salphingo oophorectomy.

Macroscopically a polypoidal mass was seen arising from the uterus measuring 7.5X4X3 cm on right side of the fundus and was adherent to right tube and ovary. C/S endomyometrium thickness was 2.5 cm. A tiny seedling intramural fibroid measuring 1 cm across was seen. C/S of subserosal mass grey-white, solid with tiny cyst-like spaces and the mass was adherent to right ovary. C/S of ovary showed multiple cysts, largest measuring 0.5 cm and contained serous fluid. C/S of cervix and fallopian tube was unremarkable(figure 1).

Microscopically endometrial glands were in proliferative phase. Myometrium showed intramural leiomyoma. The polypoidal mass showed inactive endometrial glands with stroma with surrounding hypertrophic smooth muscle close to serosal surface consistent with polypoidaladenomyosis (figure 2). Right ovary showed multiple cystic follicles. Right tube and cervix were unremarkable.

Figure 1. Gross photograph showing subserosal mass attached to one side of uterus and adhered to ovary.

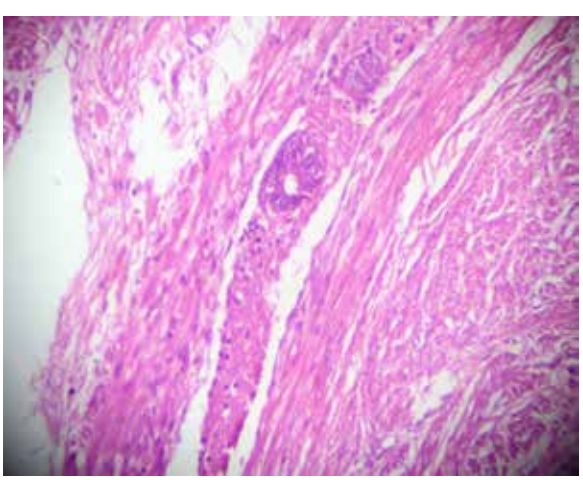

Figure 2. Microphotograph showing endometrial gland between myometrialfibres(H and E X 10)

Discussion

Adenomyosis is the presence of endometrial glands orendometrial stromal cells surrounded by hypertrophicsmooth muscle in the myometrium of uterus.[1,3]Estimates of the prevalence of adenomyosis vary widely from 5% to 70% which is probably related to inconsistencies in the histopathologic criteria for diagnosis. On the contrary, leiomyomas have a high prevalence up to 70% in Caucasians and 80% in women of African ancestry.They also have a wide spectrum of size and location (subendometrial, intramural, subserosal or a combination of these).[4-6] Adenomyosis is often found incidentally in 15–30 % of hysterectomy specimens and may be asymptomatic in 50% of cases. [7] The presenting symptoms in patients with adenomyosis are believed to be related to the extent of adenomyosis and the depth of adenomyosis penetration.[1,8,9] The condition is associated with menorrhagia, dysmenorrhoea, endometrial polyps and leiomyoma and often with endometrioid adenocarcinoma. [1,5,10] Risk factors for adenomyosis are age, multiparity, surgical disruptions of the endometrial–myometrial border, elevated levels of both FSH and prolactin (PRL), smoking habits and history of depression.[11]

Per abdomen examination can detect enlarged uterus. Macroscopically adenomyosis causes globular and cystic enlargement of the uterus. Sometimes the cut surface of uterus shows trabeculations and some cysts filled with extravasated, often haemolysed red blood cells and siderophages. [1,12] According to the microscopic criteria for the diagnosis of adenomyosis the ectopic endometrium must be located past the 'last' glands of the basalis and should be circumferentially surrounded by bundles of hypertrophic smooth muscle cells ('collar'). The foci of adenomyosis should be seen 2 mm or deeper in the myometrium or more than one microscopic field at 10_magnification from the endomyometrialjunction.Theadenomyotic glands and stroma most often are of the proliferative type, but may contain secretory to menstrual changes.[1,13] Properly oriented section are required to avoid misdiagnosing a normalhistologic finding as adenomyosis. [7,14,15]

When adenomyosis is focal,it can mimic a leiomyoma. Most of the times subserosal nodules of the uterus are almost always considered to be a subserosal leiomyoma, as in this case. Other differential diagnosis for nodular lesions are adenomyosis, endometriosis, adenomyoma and leiomyosarcoma. [12]

Leiomyomas when situated close to the serosa are referred to as subserosalleiomyomas. Cutsurface shows whorled spiral pattern of fibres. it is firm and rubbery in consistency, pops up and has sharp demarcation between it and surrounding normal myometrium. Microscopy shows interlacing bundle of smooth muscle cells. [16]

Endometriosis is the presence of endometrial glands or stroma outside the endometrium or myometrium. [17,18] Endometriosis may occur anywhere in the body and mimic a neoplasm, because rarely, endometriosis can take the form of polypoid masses that project from the serosal surfaces.[19]Also Sakamoto et al suggested that subserosaladenomyosis may develop as a variant of pelvic endometriosis on the basis of distribution of the ectopic tissues and the patients' mean age at the time of the hysterectomy. The uterus was not enlarged in this type of adenomyosis. [5] Histological picture varies with the hormonal fluctuations of menstrual cycle. The glands can be inactive in appearance. Extensive fibrosis and hemosiderin laden macrophages can be seen. Also features of conventional endometriosis were not present elsewhere despite of several sections in our patient. As a result, this lesion may be differentiated from endometriosis. [20]

An adenomyomas are well circumscribed polypoid mass. Cut surface shows cystic areas. Histopathology shows circumscribed, nodular aggregate of smooth muscle, endometrial glands, and (usually) endometrial stroma. It may be located within the myometrium or it may involve or originate in the endometrium and grow as a polyp.[1, 21]

Similar case of polypoidaladenomyosis was reported by Dobashi Y et al. [22]

Conclusion

Uterine adenomyosis presenting like a subserosal mass is rare. Subserosal nodular formations of adenomyosis, mimicking leiomyoma is possible even without significant enlargement of the uterus. Pathologists and clinicians should be aware of the existence of this type of nonneoplastic lesion and should avoid overdiagnosis and overtreatment.

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