

Atypical polypoid adenomyoma - A case report

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Abstract

Uterine Adenomyomas are rare and unusual tumors of lower uterine segment. They could be easily misdiagnosed as leiomyoma or endometrial polyp. Here we report a case of 'atypical polypoid adenomyoma of uterus' presented clinically as leiomyomatous polyp.

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MATERIAL AND METHODS

The present study on a case report of 'atypical polypoid adenomyoma' was undertaken in Rajah Muthiah medical college and hospital, Annamalai University, Chidambaram.

CASE REPORT

A 46 year old women with gravida-3, para-3, live-3 presented with complaints of abdominal pain and painful, prolonged menstruation (10/30 cycle) of one year duration. The patient responded well to oral medications initially, but continued to bleed with cessation of drugs. On examination, uterus was bulky and noticed a polypoid lesion in the lower uterine cavity. The patient was subjected to laboratory investigations, which was found to be within normal limits. Ultrasonographic examination revealed a 6x4x2cm mass in the uterine cavity and suggested the possibility of a fibroid. As the patient completed her family she was treated by hysterectomy with bilateral salpingo-oophorectomy and the specimen sent for histopathological study. Post-operative period was uneventful and the patient recovered well.

INTRODUCTION

Atypical polypoid adenomyomas are unusual and rare benign tumors of lower uterine segment. The clinical presentation and appearance of these tumors are same as that of a leiomyoma or polyp, hence easily misdiagnosed. In the past they have been confused with adenocarcinoma and low grade mixed Mullerian tumours¹. The diagnosis is almost always done by detailed histopathological study. Despite their slightly alarming appearance, atypical polypoid adenomyomas behave in a benign fashion, and may well regrow if incompletely removed².



Figure 1 and 2: Polypoid mass arising from the fundus partially obliterating the uterine cavity

Grossly, uterus with cervix measuring 10x7x3 cm, with a 6x4x2 cmsize polypoid mass occupying the uterine cavity identified. The mass appeared to extend from fund us towards the cervix and noticed a grey black hemorrhagic material in the lower surface. The cut section of the polyp showed solid grey white, grey brown areas along with grey black spots [fig:1and 2]. Both the ovaries measuring 3x 2.5x 0.5 cm, revealed corpus luteal cyst and both the tubes were unremarkable. Microscopic examination revealed, chronic non-specific cervicitis with Nabothian cyst and foci of micro glandular hyperplasia in the cervix; The polypoid mass in the uterine cavity revealed endometrial tissue composed of gland of varying size and

shape (Fig. 3 and 4), equally admixed with stromal cells and smooth muscle cells. The smooth muscle cells are arranged in sweeping bundles (Fig. 5-7). The glands are lined by single layer of columnar cells and show edpseudo stratification with atypia (Fig.8-12). Some of the glands showed stellate configuration and are cystically dilated (Fig.11). Most of the blood vessels showed thickened vessel wall. Entire tissue was edematous in nature. Both the ovaries showed corpus albicans, corpus luteum and follicular cyst. The fallopian tubes showed congestion. With clinical correlation and microscopic findings the diagnosis of an ‘atypical polypoid adenomyoma’ has been made.

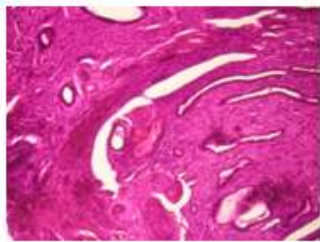


Figure 3: 10X

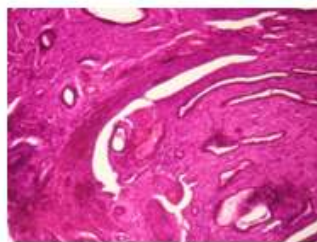


Figure 4: 20X

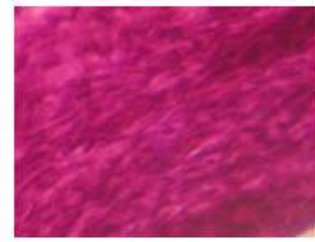


Figure 5: 40X

Endometrial glands of varying size and shape interspersed with spindle shaped smooth muscle cells and stromal cells. Smooth muscles arranged in sweeping bundles.

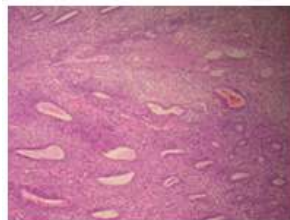


Figure 6: 10X

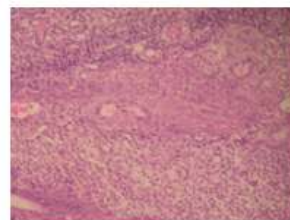


Figure 7: 20X

Endometrial glands are interspersed with smooth muscle,stroma and thickened blood vessels. Entire tissue is edematous in nature.

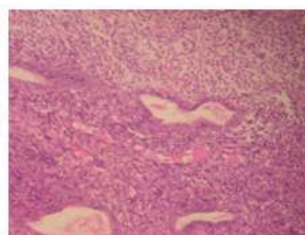


Figure 8: 20X

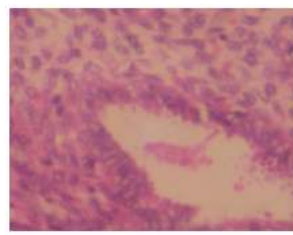


Figure 9:40X

Endometrial glands, smooth muscle cells, stromal cells and thickened blood vessels with glands showing pseudo stratification and atypia.



Figure 10: 10X

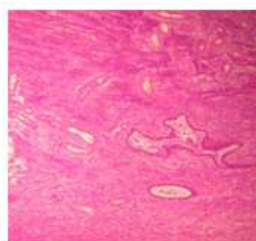


Figure 11: 10X

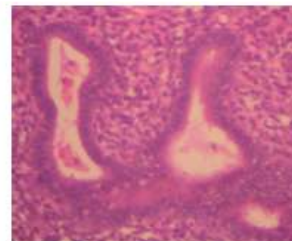


Figure 12: 40X

Endometrial glands with architectural complexity. Some glands show stellate configuration. The epithelium lining the glands are atypical and mitotically active.

DISCUSSION

Atypical polypoid adenomyoma was first described by Mazur³ in 1981, and differs from other polypoid mixed uterine lesion by its predominant smooth muscle, rather than endometrial or fibrous stroma. They usually seen in young and premenopausal women with mean age of 39.9 years⁴, and rarely seen after menopause¹. Menstrual disturbance have been the usual presenting complaint¹. They are most commonly found in the lower uterine segment⁵. They appear lobulated, well circumscribed, and rubbery tan or yellow tan, and may be pedunculated or sessile⁵. Infrequently, they are multiple and tend to be less than 2 cm in diameter^{5,6}. Microscopically, glandular elements are irregularly scattered throughout the stroma and are numerous. Extensive areas of pure stroma are uncommon. The glands appear endometrial. In addition to the distinctive vascular proliferation seen in endometrial polyps, glands with variable architectural complexity characterize this lesion⁵. Interpretation of the glandular pattern varies between authors-Rollason and Redman in 1988 indicates an appearance resembling basal endometrium⁷, but mazur³ 1981 and young *et al*⁵ 1986 noticed majority impressed by the atypia of the glands. The epithelium lining the glands is variably atypical and may be mitotically active. The glandular elements may be cuboidal, low columnar or pseudo-stratified columnar. Squamous metaplasia is a common association, forming rounded, bland-appearing squamous morules or being less commonly associated with formation of foreign body type keratin granulomas; sometimes these metaplastic areas may undergo necrosis⁵. The stroma is distinctive and integral part of the tumor and is composed of interlacing bundles of smooth muscle cell which appear benign but may on occasions show mild to moderate atypia. Mitoses are rare. The stroma is more cellular than normal myometrium and may give an appearance reminiscent of a cellular leiomyoma¹. When mitoses are present they are usually less than 2 mitoses per 10 high power fields⁵. In the present case, a single 6x 4x 2 cm polypoid mass partially obliterating the endometrial cavity noticed in a 46 year old menstruating woman. The mass was polypoid in its external surface with firm consistency. Varying from the usual site of occurrence (lower uterine segment), the mass was found to arise from the fundal region. Though it clinically mimicked a fibroid, microscopic examination revealed features of “atypical polypoid adenomyoma”- by predominant smooth muscles, irregularly scattered glands of varying architecture with some atypia and distinctive vascular proliferation. As most

of the authors (mazur³ and young *et al*⁵) depicted glandular architectural change and cellular atypia, we noticed a stellate configuration and atypia in some glands. But the squamous differentiation was not appreciable. An infrequent association between these lesions and concomitant adenocarcinoma and hyperplasia has been reported^{5,8}. In some cases glandular atypia found to be sufficiently severe to warrant the designation of adenocarcinoma in situ. Endometrial adenocarcinoma also can arise from the lesion^{9,10}. These lesions can be confused easily with an invasive endometrioid adenocarcinoma, especially in disrupted specimens, because the atypical endometrial glands are surrounded by smooth muscle mimicking myometrial invasion. The lack of reactive changes around the atypical, but not frankly malignant glands should help differentiate benign from malignant processes. If the smooth muscle component accompanying the atypical glands is mitotically active confusion with an adenosarcoma, or even a carcinosarcoma, can ensue. Rarely, peritoneal keratin granulomas have also been reported in association with atypical polypoid adenomyomas¹¹. The treatment of atypical polypoid adenomyomas include hysterectomy, D and C or hysteroscopic resection, but the efficacy of D and C or hysteroscopic resection is not known, and are considered when fertility is an important issue. They well regrow if incompletely removed¹².

SUMMARY

Atypical polypoid adenomyomas are uncommon benign tumors of uterus that are easily misdiagnosed as leiomyoma or endometrial polyp. They can be confused with invasive endometrioid carcinomas. The most common site is lower uterine segment, but can also arise from uterine fundus. The diagnosis is done exclusively by detailed histopathological study. The lesion should be excised completely to prevent the recurrence.

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