Uterine adenomyoma of endocervical type: A case report

Endoservikal tip uterus adenomiyomu: Olgu sunumu

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ABSTRACT

We report a case of adenomyoma of endocervical type that occurred in a 28-year-old-woman. The patient presented with a mass protruding into vagina which was treated by polypectomy. Histologically, tumor was composed of a mixture of proliferating glands of endocervical type and fascicles of smooth muscle cells. There were no architectural abnormalities. Both the epithelium and smooth muscle were uniformly bland. No mitotic activity was observed in the epithelial and stromal component. Polypectomized specimen was diagnosed as adenomyoma of endocervical type. This tumor type should be added to the list of a differential diagnosis of uterine endocervical tumor.

Key words: Adenomyoma, endocervical tumors

ÖZET

Yirmi sekiz yaşında kadın hastada endoservikal tip adenomiyom olgusu sunulmaktadır. Hasta vajen içine uzanım gösteren kitle yakınması ile başvurmuş ve polipektomi uygulanmıştır. Histolojik olarak tümör, yapısal anormallik göstermeyen, mitoz içermeyen düz kas demetleri ile endoservikal bezlerden oluşmaktadır. Polipektomi sonrası tümör, endoservikal tip adenomiyom tanısı almıştır. Bu tümör uterin endoservikal tümörlerin ayırıcı tanısına eklenmelidir.

Anahtar sözcükler: Adenomiyom, endoservikal tümörler

INTRODUCTION

Adenomyoma of the uterine cervix showing simultaneous proliferation of the gland and stroma is uncommon (1). It appears as an endometrial polyp projecting into the endometrial cavity. Adenomyoma is characterized by a mixture of benign gland and stroma consisting predominantly of benign appearing smooth muscle (2). Uterine adenomyomas are unusual benign tumors that can be misdiagnosed because the lesion has received scant attention in the literature. Uterine adenomyoma usually occurs in the uterine corpus and rarely in the endocer-

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vix (2-4). Herein we present a case of adenomyoma of endocervical type due to its rarity. To the best of our knowledge, less than 20 cases of this entity have been reported so far.

CASE REPORT

A 28-year-old nulliparous woman was admitted to the gynecology clinic with the complaint of a mass protruding from the vagina through the introitus. Speculum examination revealed a polypoid mass originating from the cervix. She was treated by polypectomy. The largest diameter of the polyp was 5 cm and it was graywhite and well circumscribed. Tissue samples were fixed in 10% buffered neutral formalin and embedded in paraffin. Five micron thick sections were stained with hematoxylin and eosin (HE). Immunohistochemical studies were per-

formed using the avidin-biotin complex (ABC) method. Histologically, the tumor was composed of glands lined by a single layer of endocervical-type mucinous epithelium with smooth muscle fibers (Figure 1). There was no endometrial gland in the polyp. Stromal component consisted of spindle cells with myxomatous change. No nuclear atypia was observed in the epithelial and stromal components and, there was no evidence of destructive stromal invasion such as desmoplasia. Immunohistochemically, the spindle cells were strongly positive for actin (Figures 2). In tissue sections the lesion was diagnosis as adenomyoma of the endocervix. Five years following polypectomy, the patient is well without evidence of recurrence.

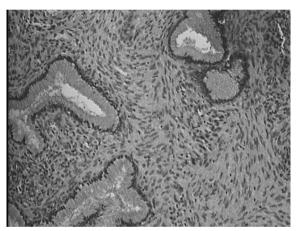


Figure 1. Proliferation of endocervical glands and smooth muscle (Original magnification, HE x100).

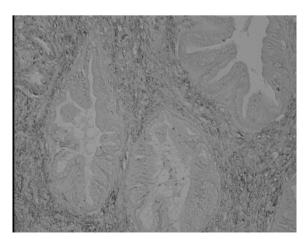


Figure 2. Actin immunoreactivity in smooth muscle cells (Original magnification x100).

DISCUSSION

Adenomyomas of uterus are clinically benign. They have both typical and atypical variants, and usually occur in the endometrium, in the lower uterine segment and rarely in the endocervix. They grossly resemble endometrial polyps (3,5). Histopathologically, tumor is composed of benign endometrial glands without architectural abnormality that are arranged haphazardly within the smooth muscle whereas; the atypical adenomyoma is composed of irregularly shaped hyperplastic glands (3). Gilks et al (6) reported 10 benign cervical tumors described as "adenomyoma of endocervical type". Histologically this tumor was composed of a mixture of proliferating glands of endocervical (not-endometrial) type and stroma consisting predominantly of benign appearing smooth muscle (6). Our findings were consistent with this definition. They observed three growth pattern on macroscopic examination, as follows; i) mural tumor, ii) growth into the endocervical canal and iii) prolapse through the external os, as seen in our case. Histopathologic confirmation of smooth muscle fibers realized by immunohistochemical staining with actin and desmin and in our case muscle fibers showed strong cytoplasmic positivity for actin and focal positivity for desmin.

The differential diagnosis of adenomyoma of endocervical type includes adenoma malignum and adenosarcoma. The well circumscribed margin, absence of invasive glands with a desmoplastic stromal reaction and the lack of cytologic atypia in adenomyoma helps in differentiating it from adenoma malignum. Adenosarcoma is distinguished from a cervical adenomyoma by the distinctive characteristics of the stroma such as uniformly bland without significant mitotic activity and lack of leaf-like pattern (3,6-8).

In conclusion, we reported the clinicopathologic and immunohistochemical features of an unusual endocervical tumor diagnosed as adenomyoma of endocervical type. The possibility of adenomyoma of the endocervix should be kept in mind in the differential diagnosis of the uterine endocervical tumors, because of significant therapeutic implications per se, especially in young patients.

REFERENCES

- Mikami Y, Maehata K, Fujiwara K, Manabe T. Endocervical adenomyoma. A case report with histochemical and immunohistochemical studies. APMIS 2001; 109:546-550.
- Kuwabara H, Ohno M, Moriwaki S. Uterine adenomyoma of endocervical type. Pathol Int 1999;49:1019-1021.
- Gilks CB, Clement PR, Hart WR, Young RH. Uterine adenomyomas excluding atypical polypoid adenomyomas and adenomyomas of endocervical type: a clinicopathologic study of 30 cases of an underemphasized le-

- sion that may cause diagnostic problems with brief consideration of adenomyomas of other female genital tract sites. Int J Gynecol Pathol 2000;19:195-205.
- Wright TC, Ferenczy A. Benign diseases of the cervix, in Kurman RJ (Ed): Blaustein's Pathology of the female genital tract. 5th ed. Springer-Verlag, New York, 2002, pp. 244-245.
- Chhieng DC, Elgert PA, Cangiarella JF, Cohen JM. Cytology of polypoid adenomyomas: a report of two cases. Diag Cytopathol 2000;22:176-180.
- Gilks CB, Young RH, Clement PB, Hart WR, Scully RE. Adenomyomas of the uterine cervix of endocervical type: a report of ten cases of a benign cervical tumor that may be confused with adenoma malignum. Mod Pathol 1996:9:220-224.
- Ota S, Ushijima K, Nishio S, Fujiyoshi N, Takemoto S, Terada A, et al. Polypoid endocervical adenomyoma: A case report with clinicopathologic analyses. J Obstet Gynaecol Res 2007;33:363-367.
- Uppal S, Heller DS, Cracchiolo B. Report of a case and review of the literature. J Low Genit Tract Dis 2003; 7:218-220



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