Angiomyofibroblastoma of the Vagina

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In 2006, a 36-year-old Burmese woman presented with prolonged vaginal bleeding. She had undergone pelvic examination that disclosed pedunculated polypoid vaginal mass. It originated from the posterior vaginal wall. Local excision was done, resulting in good condition. Pathological diagnosis was angiomyofibroblastoma.

Angiomyofibroblastoma is a rare, benign non-recurring lesion, mesenchymal tumor occurring mainly in the vulval region of premenopausal women and local excision with clear margins is an adequate treatment.

Keywords: Angiomyofibroblastoma, Vagina

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Angiomyofibroblastoma (AMF) is a rare, benign, mesenchymal tumor occurring mainly in the vulval region of premenopausal women[1-3]. It may be misdiagnosed as carcinoma of the cervix or tumor of the vagina. Local excision of the tumor mass is an adequate treatment because of the confirmation of the benign nature of AMF. This report presents a case of angiomyofibroblastoma of the vagina with discussions of pathology and management.

Case Report

A 36-year-old, Para 3-0-0-3 Burmese woman, presented with prolonged and intermittent mucous bloody discharge per vagina and a vaginal mass that slowly grew over two years. General physical examination showed malnutrition, dehydration, and mild anemia but was normal for systemic examinations. Gynecological examination revealed a polypoid, firm, pedunculated, and mobile vaginal mass that originated from the posterior vaginal wall (Fig. 1). Local excision was done, resulting in satisfactory condition.

Gross specimen consisted of a polypoid, firm, well-circumscribed, white partly dark brown mass measuring 10 x 7 x 6 cm, and 150 gms. Cut sections were white, partly semi-translucent, with few hemorrhagic areas (Fig. 2).

Microscopic finding showed multiple sections of tumor covered with squamous mucosa that focally ulcerated and partly hyperplastic. The tumor was a well-circumscribed lesion composed of alternating hyper- and hypocellular areas. Mitosis was extremely rare. Foci of infarct-like necrosis with hemorrhage were seen. Submucosa often showed myxoid change with dense inflammatory cells (Fig. 3).

The postoperative course was uneventful with no recurrence during the following six months.

Discussion

Angiomyofibroblastoma (AMF), first recognized in the early 1990s, occurs almost exclusively in the vulvovaginal region of women but can also occur occasionally in the inguinoscrotal region of men. It was derived from primitive mesenchymal cells which occur normally in this lesion and which show the potential for diverse lines of myoid differentiation[3,4]. It is a well-circumscribed tumor. It is well delineated, ranges in size from 2 to 8 cm, usually presented as painless masses, and are located in the superficial vulvar region (88.2%), canal of Nuck, or perineum. Many cases present with complicated conditions such as infection[5].

Differential clinical diagnosis were carcinoma of the cervix, condyloma acumulata, endocervical polyp, and pedunculated submucous myoma. Differential diagnosis by microscopic finding was aggressive angiomyxoma by its circumscribed border and higher
cellularity, by frequent presence of plump stromal cells, and by a lesser degree of stromal myxoid change\(^5\). The pathologic study of angiomyofibroblastoma was a well-circumscribed lesion composed of alternating hyper- and hypocellular areas. Plump round-to-spindle shaped cells characteristically cluster, or are present in linear array, around numerous delicate capillary-sized vessels set within a variably edematous to collagenous matrix. The stromal cells can be somewhat epithelioid or plasmacytoid, and are often multinucleate, having moderate amounts of eosinophilic cytoplasm and nuclei with fine chromatin and inconspicuous nucleoli. Occasionally, intralesional adipose tissue may be present. Mitoses are not a prominent feature and are generally difficult to find. Stromal mast cells can be abundant. The stromal cells of AMF are typically desmin positive and actin negative, although they can occasionally exhibit actin positivity\(^6-8\). Immunohistochemistry of the tumor cells revealed diffuse immunoreactivity for estrogen receptors, progesterone receptors, vimentin, and CD34\(^9\).

**Conclusion**

AMF is a benign non-recurring lesion and local excision with clear margins is an adequate treatment. There is one report of an angiomyofibroblastoma with sarcomatous transformation that recurred\(^9\).

**References**

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เนื้องอกชนิด angiomyofibroblastoma ที่ช่องคลอด

เลือก นพดลรัตน์กุล

ในปี พ.ศ. 2549 พบผู้ป่วยหญิงวัย 36 ปี มาโรงพยาบาลด้วยอาการมีเลือดออกทางช่องคลอดนาน ตรวจพบก้อนเนื้องอกแบบมีขั้วซึ่งเกาะติดผนังช่องคลอดด้านหลัง โดยที่มีการรักษาโดยการตัดก้อนออก ไม่พบภาวะแทรกซ้อนใด ๆ ผลตรวจพยาธิวิทยาของก้อนเนื้องอกเป็น angiomyofibroblastoma

Angiomyofibroblastoma เป็นเนื้องอกที่พบได้ในเยอบาก มีลักษณะเนื้องอกนิรภัยไม่ร้ายแรงของเนื้องอก เนื้อ mesenchyme ที่ไม่เกิดข้า พบได้บ่อยบริเวณปากช่องคลอดในสตรีวัยใกล้จะหมดประจำเดือน การผ่าตัดโดยการตัดที่ขั้วของก้อนพบว่าพร้อมเพียงดีในการรักษา