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Case Report
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Giant Fibroepithelial Polyp with Angiomyxoid Tumor

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Abstract

Fibroepithelial polyps are benign tumors which are generally located in skin creases, they originated from ectodermally and mesenchymally and their sizes are no more than one two millimeters. Occasionally they may grow excessively and reach giant sizes; they are called fibroepithelial polyps when their size became more than 5 centimeters. Even though there are various hypothesis about the reason of over growing of fibroepithelial polyps, a clear mechanism cannot be revealed. Angiomyxoid tumors are benign, mesenchymal originated tumors that expand in their mesenchymal origin histology and demonstrate fibromyxoid stromal cell hyper proliferation with dense blood vessels. Our study is to present our case about giant fibroepithelial polyp and angiomyxoid tumor which is located in vulva. This is the only study in literature presenting those two tumors together. Even association of fibroepithelial polyp and angiomyxoid tumor is considered as coincidental; it is remarkable in terms of their hormone sensitive origin due to their location in vulva of a woman in reproductive period and grows at pregnancy period.

Keywords: Fibroepithelial polyp; Angiomyxoid tumor; Mesenchymal

Introduction

Fibroepithelial polyps are benign tumors which are generally located in skin creases and originated from mesodermal and ectodermally [1]. Generally their size is no more than a few millimeters, however they called giant fibroepithelial polyp when their size exceed 5 centimeters [2,3]. Fibroepithelial polyp cases having giant dimensions were reported in the literature [1-5]. Various theories are suggested about how fibroepithelial polyps can reach such big sizes [6-11]. However a clear mechanism could not be revealed.

Angiomyxoid tumors are mesenchymal originated benign tumors which are generally located in vulva of women in their reproductive period [12]. There are aggressive and superficial types. The aggressive term suggests the infiltrative character of the tumor and high recurrence ratio. It is quite difficult to differentiate the two sub types but aggressive type is mostly located in vulva and different from the superficial type it has estrogen receptor positivity [13,14].

Our case is an angiomyxoid tumor developed in a limited focus inside a giant fibroepithelial polyp located in vulva. In literature, association of angiomyxoid tumor with trichilemmal cyst and pilomatrixoma was demonstrated but our study is the first study presenting association of fibroepithelial polyp and angiomyxoid tumor.

Case Presentation

A 38 year old woman with two children applied with polypoid mass that completely fills her right vulva (Figure 1). She stated that the mass is existing for 25 years and showing rapid growth especially in pregnancy periods. The women was admitted to obstetrics and gynecology department related with the mass previously, she was found to be HPV negative according to the scanning tests performed in there and then referred to our polyclinic. During physical examination there is a polypoid structured, pedunculus, skin colored mass having 13 cm length and a base covering vulva. At the caudal end of the mass, an irregular, granulomatosis structure is detected with palpation hardly (Figure 2). The patient is operated with the giant fibroepithelial polyp pre diagnosis and the entire lesion is excised until healthy superficial fascia is left at the base with 1 cm margin. Superomedial cutaneous skin flap is used for repairing the existing hemivulva defect. The patient is discharged on first post operative day. Any complication is not occur the patient's biopsy report is reported as 1, 5 cm diameter angiomyxoid tumor developed inside the giant fibroepithelial polyp (Figure 3). According to the report, caudal section surface of the fibroepithelial polyp, cell proliferation is observed consisting fibromyxoid stroma and intense blood vessels and those cells are dyed with actin myentine but not dyed with desmin and s100. Besides, it is stated that the tumor

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Figure 1: Left vulvar giant mass.

Figure 2: Second mass on the caudal of the fibroepithelial polyp.

is without a capsule and well demarcated. Estrogen receptor study is requested from pathology department and the result was estrogen receptor positive.

Discussion

Fibroepithelial polyps are benign skin tumors originated from ectodermal and mesenchymally. Observed in the population at the ratio of 25% and its prevalence increase with age [1]. They most commonly occur at skin creases like axilla, neck, under breasts, inguinal area. Their size doesn't exceed 2 millimeters. They are called giant fibroepithelial polyps when their size exceeds 5 cm [2,3]. Giant fibroepithelial polyp cases having giant sizes are reported in the literature [1-5]. Among the growth triggering factors; estrogen receptor positivity and hormonal sensitivity for fibroepithelial polyps located on the genital tract for the women in reproductive period are emphasized [6].

Another hypothesis claims that there can be a relation between insulin resistance and obesity with the growth of fibroepithelial polyp [7-9].

Fetsch et al. [10] suggested that irritation and inflammation media caused by chronic catheter usage may lead lymphatic stasis and fibroepithelial growth.

In another study, it is stated that foreign body reaction which is caused by shunt can be responsible related with the case that the patient using ventriculoperitoneal shunt for 20 years having an

Figure 3: Postoperative period.

expanding giant fibroepithelial polyp which is located next to the shunt [11].

In our case, it is not wrong to consider that fibroepithelial polyp which is located on the genital tract during reproductive period and demonstrating rapid growth in pregnancy period, carries estrogen receptor positivity and demonstrates growing due to hormonal reasons.

Angiomixoma, histologically angiomixoma is a mesenchymal tumor, composed of fibroblasts within a strong myxoid background. Proliferated cells are generally dyed with actin and not dyed with desmin and S 100. Vascular proliferation is also prominent and virtually no mitoses are reported [12]. There are two sub types demonstrating quite different characteristics. Superficial type is located on body and head neck of middle age men. Generally it is capsulated and well demarcated. When excised totally, recurrence rarely seems [13]. Despite aggressive type demonstrates the same characteristics histopathologically it is frequently observed in women during their reproductive period and in vulvovaginal tract. In most of them, estrogen receptor is positive and it is sensitive to hormonal changes like pregnancy [13,14]. Aggressive term is related with the local infiltrative characteristic of the tumor and 40% recurrence ratio even if it is completely excised [15]. It is suggested that most of the recurrences are caused by insufficient excision due to having irregular margins and not having a significant capsule.

In our patient, it is considered as aggressive type myxoid tumor because angiomyxoid tumors have irregular margins, grow in pregnancy period and located in vulva of women in reproductive period. Our opinion is supported by detection of estrogen receptor positive in pathological exam.

There are a limited number of studies in the literature searching association of angiomyxoid tumor and other tumors. Al-Brahim and Radhi [16] presented three patients with pilomatrixoma and angioid myxoma and suggested that pilomatrixoma could be developed from the epithelial component of angioid myxoma. However, it is reported that only 20% of superficial angiomyxoid tumors include epithelial component [17]. This theory is invalid for angiomyxoid tumors that are not consisting epithelial component. In his study, Hawkes et al. [18] presented superficial angiomyxoid tumor and pilomatrixoma association and evaluated this as coincidental.

Association of giant fibroepithelial polyp and angiomyxoid tumor in our patient is considered as coincidental due to not having any example in literature. However, their etiologic origins are the same because both two tumors are located in vulva during reproductive period, demonstrate estrogen receptor positivity and grow with hormonal changes like pregnancy. The predominant tumor is the giant fibroepithelial polyp for the patient who has this tumor since

her childhood. Angiomyxoid tumor is observed 1, 5 cm sized and in one section of this. In this situation, it can be considered that angiomyxoid tumor is developed from mesenchymal component of fibroepithelial polyp.

When they are evaluated as two separate entities and considered as two interpenetrated tumors, it is important to make surgical excision sufficiently. When giant fibroepithelial is not excised totally they became prone to nondestructive local recurrence. However, even angiomyxoid tumors are totally excised, frequent recurrence is still observed. Despite the surgical margins of the patient is reported as safe, follow up with frequent intervals is recommended due to the angiomyxoid component of the tumor. It is planned to make follow ups once in every 3 months with examination and mr in periodic intervals.

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