A Rapidly Growing Giant Vulvar Fibroma On The Right Labia Majora, A Rare Case Report

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A Key Clinical Message:

Fibroma typically has small sizes that do not exceed 5 cm and grows slowly. However, in rare cases, it can grow rapidly and reach giant sizes.

Keywords:

Giant Fibroma, Labia Majora, Excisional Biopsy, Vulvar Neoplasm

Introduction

Numerous benign vaginal tumors are susceptible to arise, including fibroma, which accounts for 0.03% of gynecologic neoplasm cases [1]. Fibroma is more common in the neck, uterus, axillae, and eyelids regions, but infrequent in the vulva [2,3]. These lesions can be discovered by chance during normal gynecologic examination and rarely grow larger than 5cm in diameter. They tend to be solitary, polypoid, or pedunculated [4].

It is important to stress that in younger women, Human papillomavirus is linked to malignant vulvar neoplasms, but inflammatory dermatoses, like scleroatrophic lichen, are mostly identified in elderly female patients [5].

Typical symptoms include discharge, discomfort with an overwhelming sensation of a mass, and ulceration with superficial bleeding generally as a result of persistent friction or trauma [4,5]. Differential diagnosis of vaginal lesions includes various malignancies such as squamous cell carcinoma [4] and the appearance may resemble vulvar cancer growth patterns, hence a biopsy is necessary for a histological investigation to rule out malignancy [6]. Computed tomography (CT), ultrasound (US), and Magnetic resonance imaging (MRI) are preferable for gynecological neoplasm diagnosis [4].

Herein, we describe a unique case of a giant vaginal fibroma that was managed with an excisional biopsy**.**

Case History / Examination :

A 43-year-old multiparous woman (Gravida 4 Para 4) was admitted to the obstetrics and gynecology department for a giant painless mass in the right-sided vulva with ulceration and foul-smelling vaginal discharge for four months. Medical history is significant for Psoriasis, with no significant family or surgical history, no fever, and the patient is a non-smoker.

Her menstrual cycles were regular with no dysmenorrhea and normal vaginal deliveries. On clinical examination, paleness was observed, without jaundice, and a rash with itchy, scaly patches was presented on the hands and feet . On genitourinary examination, an ulcerated, pedunculated giant vaginal mass that measures 1.7 kilograms was recognized on the right labia majora.

Methods:

The findings suggested the differential diagnosis of Squamous cell carcinoma, Basal cell carcinoma, and fibroma (fig .1). Laboratory test results include hemoglobin (9.1 g/dl), Blood Sodium (129 mEq/L), and Blood calcium (1.28 mg/dL).

Transvaginal ultrasonography (TVUS) demonstrated a normal uterus that contains a paragard intrauterine device(IUD), normal left adnexa, and an enlarged right ovary. On spiral computed tomography scan with intravenous (IV) and oral contrast, the presence of a gallstone, an oval-shaped cyst(4*7cm) on the right uterine adnexa, irregular, central necrosis, oval mass(15*7*17cm) on the right labia majora, and a right iliac lymphadenopathy is observed (fig .2).

An excisional biopsy was performed. The pathological examination result confirmed the diagnosis of a benign fibroma with ulcerative epithelium covering the surface of the mass, subepithelial inflammatory infiltration which consists of lymphocytes, plasma cells, and fibroblasts, with edema in the stroma, and no evidence of malignancy (fig .3).

Conclusion and Results :

The patient was given Ceftriaxone (1g), With a continuous infusion of calcium gluconate. A blood unit was transfused while monitoring the urinary output until it returned to its normal range.

The patient was discharged the same day in stable condition and the subsequent follow-up period of one month transpired without any complications.

Discussion:

Fibroma is a tumor consisting primarily of collagen with interspersed fibroblasts and overlying intact squamous epithelium [7]. rarely affects the vulva with an incidence of 0.03% of all cases of gynecologic neoplasms [1,7]. Its etiology is due to hyperproliferation of normal stromal tissue of the vulva, which occurs due to physiological hormonal changes [8]. Its peak incidence is between 20 to 40 years old and rarely occurs in children or patients older than 40 years old [1], Our patient is a 43-year-old female.

When fibromas are located on the vulva, they often affect the labia majora and less frequently in the labia minora, clitoris, vestibule, and posterior commissure [2]. In our case, it affected the labia majora. Vulvar fibromas are usually small but can become pedunculated as they grow larger [7]. There are rare reports in the literature of giant fibromas developing without seeking medical help [8]. However, our patient took only four months before asking for medical help because her tumor developed very quickly, even though fibromas are characterized by slow expansion and growth [9]. But in our case, its size increased remarkably over 4 months until it became a pedunculate oval mass with (15*7*17cm) size, meanwhile, Najam et al, reported that their case took 7 years to get(15*8*18cm) [9], as Isoda et al, mentioned that his case took 5 years to be only 7 cm sized [1]. Başbuğ et al, reported that one of the largest vulvar fibromas measured 550 g, and it took 2 years to reach this weight [3], but in our case, the tumor reached 1.7 Kg in only four months.

Vulvar fibromas are often asymptomatic in their early stages, but once they develop, symptoms usually include discomfort due to increased size and weight, pain when walking, and difficulty urinating [8,10]. Ulceration with superficial hemorrhage is commonly observed in tumors with a long clinical duration and is often caused by repeated trauma [2]. It also causes extreme emotional agitation and social withdrawal [9]. Our patient's tumor was painless, accompanied with pressure sores and foul-smelling vaginal discharge. It is very difficult to distinguish fibroma from other vulvar masses. Therefore, lipoma, inguinal hernia, vulvovaginal cyst, vulvar elephantiasis, and fibroepithelial tumor are important differential diagnoses [2].

Diagnosis is determined by physical examination, histopathology [9], MRI, CT, and Ultrasound [4]. Physical examination showed a giant pedunculated vulvar mass and palpable lymph nodes (fig 1). palpable lymph nodes in the inguinal region were not common in the other cases of vulval fibroma [2,9,10]. While MRI findings of most of the cases with vulvar lesions are non-specific [1], we preferred to do CT and ultrasound. Ultrasound revealed a normal uterus, left appendages, and an enlarged right ovary. CT shows an oval-shaped cyst(4*7cm) on the right uterine appendages, an irregular, central necrosis, oval mass (15*7*17cm) on the right labia majora, and a right iliac lymphadenopathy (fig. 2).

The ovarian cyst was a small physiological ovarian cyst that didn't need follow-up, however, because of the lymphadenopathy, we were unsure of the lesion's nature, whether it was benign or malignant, Since it is uncommon for a malignant tumor to grow to such proportions without being identified or exhibiting additional symptoms, and to assess the tumor and the lymph nodes, we carried out an excisional biopsy and we ruled out malignancy. Treatment for benign tumors includes surgical removal [2]. In our case, this operation was performed under lumbar anesthesia, the tumor pedicle was tied at its origin, and then an excisional biopsy of the mass was performed, followed by hemostasis of the wound site. Pathologically, fibroma is a hypocellular, will-defined mass composed primarily of mild spindle-shaped cells and interstitial collagen [11]. The pathological examination result in our case was a benign fibroma with stromal edema consisting of fibroblasts, inflammatory infiltration lymphocytes, and plasma

cells on the surface (fig. 3).

Wound complications after vulvectomy for nonmalignant lesions are common. Most complications are wound separation or destruction, then infection and hematoma. Risk factors for wound complications are smoking, obesity, and diabetes mellitus [12]. Recurrence may occur due to incomplete resection, but Re-excision is usually curative [8,11]. In follow-up, our patient rested in the hospital for 5 hours, was covered with a dose of ceftriaxone (1g), and then was discharged without any complications. After one month, there was no evidence of recurrence or wound complications.

Conclusion:

This case serves as an important reminder of the importance of periodic check-ups especially when noticing the appearance of a new-rapidly growing mass in the vulvar region, and keeping fibroma as a potential diagnosis for any giant vulvar tumor.

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Abbreviations list

CT: Computed tomography.

US: Ultrasound.

MRI: Magnetic resonance imaging.

TVUS: Transvaginal ultrasonography.

IUD: intrauterine device.

IV: intravenous.

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`FIG.1.docx` available at https://authorea.com/users/812270/articles/1213735-a-rapidly-growing-giant-vulvar-fibroma-on-the-right-labia-majora-a-rare-case-report

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