CASE REPORT

Extremely large vulvar fibroma in a 15-year-old girl

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Abstract

BACKGROUND: Fibromas and fibromyomas belong to the most common solid vulvar tumors. Their cause remains unknown.
CASE: A 15-year-old girl arrived at our department for extirpation of a large pendulous vulval fibroma. For three years she had observed a gradually enlarging structure protruding from her external genitals. After a preoperative CT examination the tumor was extirpated with a histological diagnosis of benign soft fibroma.
CONCLUSION: Our report describes a therapeutic management of a large vulval fibroma in a young girl. The extended time from first symptoms to final treatment deserves reflection.

INTRODUCTION

Fibromas and fibromyomas belong to the group of most common solid vulvar tumors. Their cause remains unknown. They usually appear as solitary, slightly raised, gray-brown, mobile indurated lesions (3–8 mm in diameter) developing along the insertion of the round ligament into labia majora. Fibromas can be pedunculated but rarely reach a significant size (Giuseppe *et al.* 2011). These tumors can be treated by removal, including a careful histopathological examination in order to exclude a rare leiomyosarcoma or sarcoma (Gokdemir *et al.* 2005).

This case report presents the case of a 15-year-old girl who arrived for surgery due to large vulval fibroma. The disease course was 3 years. Extirpation of the tumor was performed after admission to our department. Perioperative procedures and postoperative treatments were uneventful.

CASE REPORT

A 15-year-old girl presented to our department for elective surgery. For three years she had observed a gradually enlarging structure that protruded from her external genitals.

Her medical history was noncontributory. Her first menstruation was at age 12 years and with no history of prior surgeries and no long term medication. At the time she was enrolled in secondary school.

During the initial examination we observed a 5 cm long by 1 cm wide vascular stalk extending from the labia majora that passes to a thin, partially solid pendulous structure measuring 11 × 16 cm with a decubitus on its basis.

A CT scan of lesser pelvis and tumor, performed preoperatively as a part of the differential diagnosis, revealed physiological findings in the lesser pelvis and a rare CT picture of the tumor.

Extirpation of the tumor was performed under a general anesthesia.

Histological finding: benign soft vulval fibroma.

The postoperative course was uneventful and healing was by primary intention.

DISCUSSION

Vulval diseases are relatively common and involve a wide range of disorders. Therefore they often require a multidisciplinary approach. Their diagnosis, differential diagnosis and therapy belong mainly to the area gynecology, dermatology and pathology (Gokdemir *et al.* 2005). Benign involvements affecting the vulva include, among others, vulval atrophy, benign tumors, hamartomas and cysts, infectious disorders, and non-neoplastic epithelial disorders (Rob *et al.* 2008). 'Proper' benign vulvar tumors are not very common. Histological type and biological etiology should be specified by histopathological examination (Larrabee and Kylander, 2001; Liu *et al.* 2010; Giuseppe *et al.* 2011).

The 'proper' benign vulvar tumors include fibromas, lipomas, leiomyomas, hemangiomas and pigmented nevi; fibromas are the most common (Rob *et al.* 2008).

Although fibromas and fibromyomas are common solid vulvar tumors, their cause remains unknown.

Histologically, these tumors appear as a well-demarcated area of interwoven collagen fiber bundles (without elastic fibers) and covered by normal or hyperplastic epidermis; in fibromyomas, muscle fiber bundles are also evident (Giuseppe *et al.* 2011).

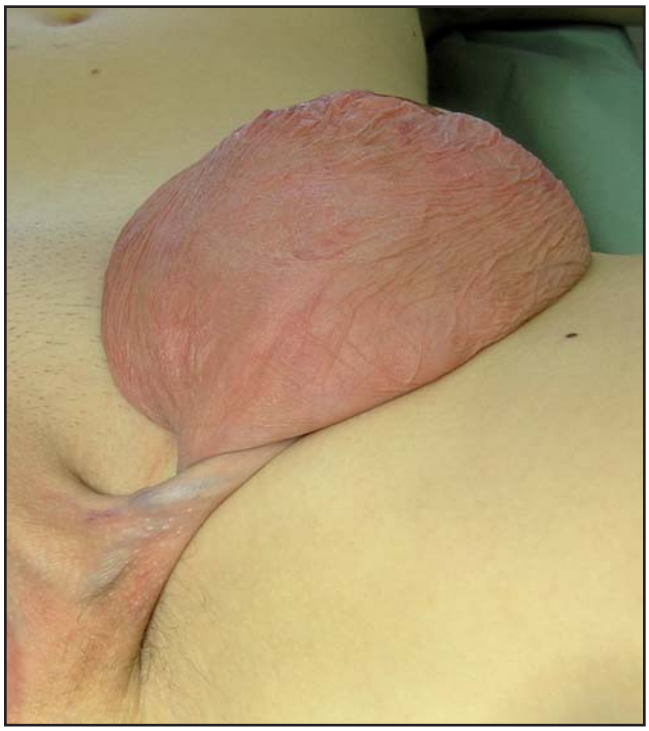

Fig. 1. Vulvar fibroma – 15-year-old girl.

Vulvar fibromas in girls are relatively rare in the Czech Republic as well as in other countries.

Cohen *et al.* (1999) described a case of vulvar myoblastoma in a 9-year-old girl, and although this diagnosis is very rare, the differential diagnosis must take into account fibroma, papilloma, lipoma, hydradenoma and cysts of the external genitals.

Iwasa and Fletcher (2004) describes 11 mesenchymal vulval tumors (8 of which were associated with the labia majora) in prepubertal girls. Tumors were unilateral in submucous or subcutaneous location and their size ranged from 2 to 8 cm. Nine patients were followed and recurrence occurred in three. With regard to histological characteristics, Iwasa proposes that the described tumor be referred to as a "prepubertal vulvar fibroma".

Sachdev (2005) described the case report of a woman with a concurrent vulvar tumor and breast tumor. Histologically this case was concluded as vulvar fibromatosis and breast fibroadenoma.

Nikolova *et al.* (2005) reported on a case of fibrous vulvar hamartoma in a prepubertal girl.

Berlin and Berlin (2007) described a large vulvar tumor in an 18-year-old girl which prevented participation in many social activities and was emotionally traumatizing. Surgical excision of the tumor enabled return to normal life. Liu *et al.* (2010) presented a summary of the literature and two cases of a prepubertal vulvar fibroma, one in an 8-year-old girl and the other in a 54-year-old woman. The authors claim that tumors reoccur in 1/3 of cases, mostly due to incomplete excision. Spontaneous regressions have also been described as well.

Zhang *et al.* (2011) describes the case of an 18-year-old young woman with a prepubertal vulvar fibroma having a favorable prognosis. Blake *et al.* (1998) presents a case of vulvar angiomyofibroblastoma in a 23-year-old woman.

Complete extirpation of the tumor is the main and usually also the only therapeutic procedure. However, histological examination of the extirpated tumor can definitively determine if there is a need for additional therapy and exclude the possibility of extremely rare malignancies.

A differential diagnosis should consider other benign vulvar tumors, false tumors (cystic affections), hernias and extremely rare congenital malformations.

It is interesting that women who have obvious tumors of significant size (a large finding) often postpone final treatment. Ajibona *et al.* (2007) described a case of an adult woman with large vulvar tumor that had remained untreated for 30 years. Histologically it was finally diagnosed as a prepubertal vulvar fibroma.

CONCLUSION

The case of a young girl with large benign vulvar fibroma and its therapeutic management was presented in this report. It is especially remarkable that the patient

had delayed seeking treatment for the tumor, considering that its size had undoubtedly affected her personal life for the three years since it appeared. We must consider whether she intentionally hide this problem and postponed treatment for 3 years or if there was a failure in the system of out-patient preventive care.

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