Giant Acrochordon Arising from the Thigh
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ABSTRACT
Acrochordons commonly develop from skin on the neck and axillary region, but may be found on any region of body. Although some predisposing factors have been implicated, the definite etiology has yet to be determined. We report the case of a 46-year female patient who presented with a large mass lesion on the inner aspect of the thigh. She stated that the swelling had emerged some 20 years ago and had progressively grown since then. Magnetic resonance imaging revealed a solid lesion with no anatomic relationship with musculoskeletal structures. Taking into account the basal width of the lesion, spinal anesthesia was administered and the lesion was excised with an intact surgical border of approximately 1 cm. The resulting defect was primarily closed. A histopathologic examination led to the diagnosis of an acrochordon with a size of 20 x 14 cm. To the best of our knowledge, this is the largest acrochordon lesion with the widest base reported in the literature.

Key Words: Acrochordon. Skin tag. Soft fibroma. Thigh.

INTRODUCTION
Acrochordons are small, benign pedunculated skin tumors with a soft consistency and smooth contour, and can appear as a superficial nodule or a papilloma. They may be of the same color of the skin or hyperpigmented.¹ Acrochordons are also referred to as skin tags, fibroepithelial polyps, soft fibromas, and fibroma pendulans.² They typically develop from skin of the neck and axillary region, but they can emerge from any part of the body.¹,³ The incidence of acrochordons is quite high in the overall population,⁴ occurring equally in both men and women. They are especially common during middle age, and more than half of the population ≥ 70 years of age has these lesions.⁵ Their occurrence is also sometimes associated with a family history.⁵,⁶

Here, we present a case of an unusually large, broad-based acrochordon in a 46-year female patient.

CASE REPORT
A 46-year woman presented with a mass lesion located on the inner aspect of her left thigh. She stated that the lesion had first emerged some 20 years ago and had grown progressively until the time of presentation. She had no systemic diseases, such as diabetes, and had not previously undergone any surgical operations.

Upon physical examination, the mass lesion was of 15 x 15 cm with the appearance of a cauliflower (Figure 1). To determine the relationship of the mass with muscular structures, magnetic resonance imaging was performed showing an exophytically grown, smooth-contoured,
lobulated, solid-mass lesion of the left thigh. The mass showed a suppressed signal intensity in fat suppression sequences, similar to fat tissue and diffuse fat content, and was accompanied by iso-hypointense signals that are not suppressed in fat tissue sequences (Figure 2). Considering the broad base of the lesion, spinal anesthesia was administered. After appropriate surgical site clearance, the lesion was excised with a 1 cm margin of normal tissue. Then, the defect was closed primarily. The patient was discharged without any complications on the second postoperative day. Histopathologic examination revealed that the lesion was an acrochordon.

**DISCUSSION**

The majority of acrochords are asymptomatic and do not cause pain unless they become inflamed or irritated, but may create discomfort when in contact with clothing or jewelry. Acrochords vary in size, typically from 1 to 5 mm in diameter, though diameters > 5 mm have been reported. Giant acrochordons are usually observed on the lower half of the body, particularly in the penile or vulvovaginal region. Reports of giant acrochordons include an 8 cm lesion located on the vulva and 22 cm mass located on the labium majus. However, broad-based acrochordons are very rare. The base width of the acrochordon in the case presented here was 13 x 8 cm.

Although the etiopathogenesis of acrochordons has not been definitively described, it has been attributed to metabolic disorders, insulin resistance, diabetes mellitus, dyslipidemia, atherosclerosis, and obesity, as well as viral agents, such as human papilloma virus, and genetic tendency. Frequent irritation of skin creases in obese patients and dermal wear due to aging have also been implicated as important etiologies. Fluctuations in estrogen and progesterone levels during pregnancy and elevated growth hormone levels seen in acromegaly are thought to increase the incidence; and hormones, such as epidermal growth factor and alpha tissue growth factor can promote the development of acrochordons.

Although most lesions are benign, some acrochordons can show a malignant transformation. A relationship between tumor size and malignant transformation has been reported, with larger acrochordons showing a greater malignancy potential. However, the case presented here showed no signs of malignancy, despite being among the largest of lesions reported and having the largest base width. Commonly considered differential diagnoses include neurofibromatosis, melanocytic nevus, premalignant fibroepithelial tumor, seborrheic keratosis, and genital and nongenital warts.

After excision of broad-based lesions, different reconstruction techniques can be applied depending on the flexibility of skin and subcutaneous tissue of a patient. Surgery is the most commonly employed treatment approach in symptomatic cases. In small lesions, a pedicle can be resected from its base with the help of a scalpel or scissors. In large lesions, simple excision and primary repair is appropriate. In this patient, we were able to primarily close the defect after mildly elevating subcutaneous tissue. Apart from these techniques, cryotherapy and ligation techniques can be applied. The excised lesions should be sent for histopathologic examination, as acrochordons may contain other tumoral lesions such as aggressive angiomyxoma, angiomylipofibroblastoma and sarcoma.

**REFERENCES**