

Case Report

Acrochordon Arising From Vulvar and Thigh, 15 to 150 mm: Report of 5 Cases

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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, such as vulvar area or thigh. These lesions are a type of mesenchymal lesion commonly called fibroepithelial polyps, soft fibroids, skin tags or fibroma pendulans. We present here a report of 5 cases of acrochordons in the vulvar region and thigh that reflect the heterogeneity of clinical presentations reported in the literature. Appropriate management of patients who are seen for vulvar acrochordons can significantly improve the quality of life of these women.

Keywords: Acrochordon; Skin Tag; Vulvar Lesion; Anatomic Aspect

Introduction

Acrochordons are a type of mesenchymal lesion commonly called fibroepithelial polyps, soft fibroids, skin tags or fibroma pendulans [1]. These lesions represent the most common fibroepithelial skin tumors; they consist of acquired benign polyps that grow in the natural folds of the skin, such as the neck, axillae, thigh and inguinal, perineal and inframammary regions, in the eyelids and in the intergluteal folds [2,3].

Skin tags are characterized as pedunculated and tender papules that protrude from the skin surface. Lesions may be single or multiple, varying in size between 2 and 10 mm, with a tendency to grow progressively without spontaneous involution. The typical small lesions show high incidence in the adult population, up to 46% over 40 years and 59% after 70 years. However, larger acrochordons and even giant lesions identified in the vulvar region are rare [4,5,6].

In the literature, most papers on vulvar acrochordons or even acrochordons in the thigh region along the perineum are case reports. The average age of patients in these reports is 43 years old, ranging from 15 to 86. Despite citations that acrochordons are rare in menopause, it is possible to identify several cases of vulvar acrochordons in postmenopausal women. The long evolution of lesions is unsettling, some of which grow for over 20 years and usually without symptoms but cause important aesthetic changes [5-15].

Benign vulvar disease is one of the most frequent reasons for gynecological consultation. Vulvar disorders can produce sexual dysfunction and alter body image. Appropriate management of patients who are seen for vulvar changes can significantly improve the quality of life of these women [5]. Knowledge of the vulva anatomy is an important factor for timely diagnosis and proper treatment of skin tags, especially when these appear as giant lesions on the vulva.

Case Reports

We report here on 5 cases of acrochordons in the vulvar region that reflect the heterogeneity of clinical presentations described in the literature. All patients had proposed excision of lesions, and histopathology confirmed fibroepithelial polyps (acrochordons). None of the patients had a family history of similar lesions.

Case 1

A 50-year-old postmenopausal patient with hypertension and a body mass index (BMI) of 34 came in for routine gynecological assessment, and a pedunculated lesion was identified on the right labium minor, suggestive of a skin tag of approximately 4 cm. The patient did not report any associated symptoms. She stated that the lesion first appeared 2 years ago and grew progressively, increasing in size in the last 6 months, until the time of presentation. We performed an excision of the lesion under local anesthesia and sutures.



Case 2

A 54-year-old postmenopausal woman without comorbidities was referred to the clinic due to a pedunculated lesion located on the left labium majus (1.5 cm in length), which had been present for the last three years.



We performed the excision of the lesion under local anesthesia and sutures. We did not find any other similar lesions. The patient did not acknowledge any symptoms associated with the skin tag besides the aesthetic issue.

Case 3

A 34-year-old patient presented with a pedunculated lesion (skin tag), 3 cm with soft consistency, on the left labium minor, 6 months after delivery. The patient had excision of vulvar intraepithelial neoplasia (VIN) associated with human papillomavirus two years before diagnosis of the skin tag. Surgical excision of the lesion was performed under local anesthesia. The complaint of the patient was vulvar aesthetic change.



Case 4

A 46-year-old female was referred to the gynecology clinic because of a pedunculated skin lesion located on the left labium majus. Upon physical examination, the lesion was 8 cm in length. The lesion was not related to any symptoms except for a nuisance in clothes and during sexual intercourse. The patient reported that the skin tag first developed 15 years ago and had grown progressively and slowly. Surgical excision of the lesion was performed under local anesthesia.



Case 5

A 32-year-old woman presented with a mass lesion located on the right inner thigh. Upon physical examination, the lesion mass was 15 x 7 cm, elastic in consistency and broad based. The patient reported the appearance of the lesion 4 years ago. The complaint was related to the lesion's volume that caused discomfort when walking and associated with dragging pain. The lesion was excised by surgery with complete closure under general anesthesia.



Discussion

Acrochordons have a familial component; however, the genetic segregation pattern and ethnic characteristics have yet to be defined. The lesions have been associated with human papillomavirus (HPV), metabolic disorders and hyperinsulinemia [16,17]. HPV infections of the genital mucosa classically present as warts (condylomata) and are traditionally defined by the presence of a viral cytopathic effect (koilocytosis). HPV seems to play a significant role in the growth and progression of fibroepithelial polyps as demonstrated by Crock, with reports of HPV 11/06 present in 88% of fibroepithelial polyps [17]. Although there is a relationship between the expression of some biomarkers such as p16 and Ki67 in HPV-related vulvar and cervical dysplastic lesions, it would not be directly related to non-dysplastic lesions such as fibroepithelial polyps [18].

In the reports presented here, only one patient had a history compatible with association with HPV and pregnancy. Case 3 had an excised koilocytic-associated vulvar intraepithelial lesion two years prior to the diagnosis of acrochordon. We did not investigate the expression of p16 or Ki67 in any cases. In our five cases, microscopy identified a polypoid lesion of fibroconjunctive tissue well vascularized without atypia, irregularly acanthotic and hyperkeratotic epidermal lining without

cellular atypia, melanocytotic proliferation, koilocytosis or hypergranulosis.

A possible relation with multiple, large, hyperpigmented acrochordons and diabetes mellitus was first cited by Margolis and Margolis in 1976 [19]. Other studies also have shown a positive correlation between type II diabetes and glucose intolerance with these skin lesions [17,20,21]. Besides these abovementioned relations, there are also reports of associations with pregnancy, acromegaly, dyslipidemia, intestinal polyps, obesity, atherosclerosis, and various syndromes such as polycystic ovaries, Birt-Hogg-Dubé and Cowden [16,19,20,22,23].

There was no history of diabetes mellitus or glucose intolerance in any of our cases; however, case 1 had obesity and cardiovascular changes (hypertension), which could be associated with dyslipidemia.

Estrogenic hormone variations and trophic hormones such as IGF-1 (insulin-like growth factor-1), insulin, epidermal growth factor (EGF), and transforming growth factor- α (TGF α) are involved in the genesis and development of acrochordons [22,24,25]. Demir & Demir found a 9.6% prevalence of acrochordons (120 cases) in a population of 1250 patients. The most frequent location of the lesions was the neck, and most of the patients had less than 3 acrochordons. This paper showed a correlation between the presence of skin tags and diabetes mellitus. According to these authors, acrochordons are cutaneous manifestations of changes in carbohydrate metabolism [19]. However, this same association does not seem to be present in most reported cases of giant vulvar acrochordons, including our reports [11-13,15].

As shown in our reports, several studies have observed different clinical presentations of giant vulvar acrochordons. Table 1 compiles some of these characteristics in the history of patients. In Table 2 we show the characteristics of the cases reported here.

Although some studies suggest a relationship between tumor size and malignancy with larger acrochordons showing more potential for malignancy [1,26]. skin tags are considered by others as benign lesions, single or multiple, because in its clinical aspect, there is low probability of malignancy [27,28]. Differential diagnoses include neurofibromatosis, premalignant fibroepithelial tumor, melanocytic nevus, seborrheic keratosis, and genital and nongenital warts.

In addition to the excision procedure, cryotherapy and base ligation techniques may be applied. The excision of the lesion allows the possibility of obtaining histopathological information, important for diagnostic conclusion [10].

Authors	Paper	Year of Report	Patient's Age	Skin Tag Site	Lesion Size (Larger Length)	Lesion Progression Time
Canalizo-Almeida S, et al	Dermatology Online Journal [8]	2007	19 years old	right labium majus	30 cm	2 years
		2007	56 years old	left labium majus	15 cm	4 years
Choudhary ST	J Cutan Aesthet Surg [14]	2008	40 years old	right thigh	8 cm	25 years
Farshchian M, et al	Iranian J Dermatol [9]	2009	60 years old	left thigh	10 cm	10 years
Bano R	J Coll Phys Surg Pak [7]	2012	37 years old	right labium majus	4 cm	2 years
Sampaio PRL, et al	Brasília Med [12]	2012	86 years old	right perianal region	4,5 cm	6 months
		2012	43 years old	right labium majus	1,1 cm	8 months
Kassionove A, Raam R	J Emer Med [5]	2013	27 years old	right labium minor	5 cm	2 months
Agarwal A, et al	NJDVL [6]	2015	55 years old	left labium majus	20 cm	6 months
Bahce ZS, et al	J Col Physician Surg Pak [10]	2015	46 years old	left labium majus	15 cm	20 years
Borré-Arrieta O, Monsalve-Montoya R	Revista ciencias biomédicas [11]	2015	32 years old	right labium majus	11 cm	10 months
Ozkol HU, et al	Indian Dermatol Online J [13]	2015	15 years old	right labium majus	20 cm	No description
Garg S, Baveja S	J Cutan Aesthet Surg [15]	2015	50 years old	left labium majus	16 cm	3 years

References [5-15]

Table 1. Characteristics of vulvar and thigh acrochordons reported in the literature.

Patient's Age	Comorbidities	Skin Tag Site	Lesion Size (Greater Length)	Lesion Progression Time
50 years old	hypertension/obesity	right labium minor	4 cm	2 years
54 years old	none	left labium majus	1.5 cm	3 years
34 years old	vulvar intraepithelial neoplasia	left labium minor	3 cm	6 months
46 years old	none	left labium majus	8 cm	15 years
32 years old	none	right thigh	15 cm	4 years

Table 2. Characteristics of acrochordons reported in this paper.

It is clear that there is a wide variation in age at vulvar acrochordon occurrence, as noted in the literature review (15-86 years old) and in our reports (32-54 years old). Thus, it is important to reinforce the aspects related to good clinical practice, with a high degree of suspicion about the history and gynecological physical examination. The long evolution of lesions, as noted above, is remarkable, in some cases more than 20 years [10,14] and 15 years in our study, in which there are usually no symptoms, but still, cosmetic changes and poor quality of life for patients. Changes in the perineum anatomy caused by acrochordons call attention to the need for adequate knowledge of skin tags, which can appear either as pedunculated (most) or sessile lesions.

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