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Adenoma Of The Nipple In A Man: Case Report

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Abstract

Adenomatosis (adenoma, papillary adenoma, florid papillomatosis) of the nipple is a rare benign disorder involving the nipple witch can be mistaken clinically for Paget's disease and pathologically be misinterpreted as an adenocarcinoma. It occurs mostly in middle-aged women and is extremely rare in adolescents and children. Adenomatosis of the nipple is a well-known in women, but extremely rare in males. We report a 55-year-old man with an adenomatosis of the nipple evolving positively after surgery.

Introduction

Adenomatosis of the nipple (AN), also called superficial papillary adenomatosis, erosive adenomatosis or florid papillomatosis, is an uncommon benign mammary disease that occurs mostly in middle-aged women and is extremely rare in men and children. This report describes a new case of a male patient clinically and histologically diagnosed with adenoma of the nipple.

A 55-year-old man, without significant previous medical history, consulted in the department of dermatology for a mass lesion of his right nipple that appeared 6 months before and grew gradually.

Physical examination revealed an irregular nodule on the right nipple area with edema. The mass, measuring 21 mm x 13 mm, was flesh-coloured, swelling, non adherent to the right breast and with no attachment to pectoral muscle. The adjacent skin did not present eczema, inflammation or ulceration (Fig 1). The left breast and nipple were normal (Fig.2). There were no palpable axillary nodes. The ultrasonography showed a hypoechoic irregular nodule measuring 19.5 mm in the nipple area with no other abnormal findings on the ultrasonography of the right nipple, breast and axillary area.

A biopsy specimen revealed a proliferation of gland like structures in which the tubules were lined with a double layer of epithelial cells, an outer myoepithelial layer of cuboidal cells. These findings were consistent with the diagnosis of AN (Fig.3)

Once pre-operative blood tests were achieved, a complete resection of the nipple with reconstruction was performed. After excision of the nipple, the histological study made a definite diagnosis of AN.

The patient was pleased with the results because the architecture of the nipple was preserved (Fig. 4). Our patient has no signs of progression of the disease in 13 months of follow-up.

Case Report(s)

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Discussion

Adenomatosis of the nipple (AN) is a complex benign mammary proliferation, first described in 1955 as "florid papillomatosis of the nipple duct" by Jones and al [1].

AN occurs mostly in middle-aged women and is extremely rare in men and children. Most patients with

AN are in their fourth or fifth decade of life.

In their review of literature, Montemarano and al reported only five cases in men [2, 3].

The lesion may be asymptomatic or characterized by a serous or serosanguinous discharge, tenderness, crusting, pruritus, erythema, swelling or induration. Nipple adenoma is often clinically misdiagnosed as Paget's disease of the breast [3, 4].

In the World Health Organization classification of breast tumour, established in 2003, AN is defined as "a compact proliferation of small tubules lined by epithelial and myoepithelial cells, with or without proliferation of the epithelial component, around the collecting ducts of the nipple." [5].

Histologically, it is sometimes difficult to distinguish nipple adenoma from carcinoma arising in the nipple. The presence of a myoepithelial cell layer in neoplastic ducts is thought to be the most important histological finding for distinguishing adenoma from carcinoma [6].

Dermatoses of the nipple are rare, and because gross appearances of these lesions are very similar, differential diagnosis is of great clinical importance. Early lesions are scaly and erythematous, and they can be misdiagnosed as eczema or inflammatory skin disorders of the nipple and treated with topical medication.

Benign tumours may include mammary duct ectasia, nipple calcifications, abscess of the Montgomery gland, and rarely nipple adenoma. Malignant abnormalities may include Paget disease and primary lymphoma as well as carcinoma of the breast.

For most authors, the treatment of choice for AN is a limited local excision. Complete or partial resection of the nipple depending on the size and extent of the tumour. Only patients with large lesions need a complete resection of the nipple. In some cases, nipple reconstruction should be done [7].

Handley and al advocated the total excision of the nipple and the areola with an underlying wedge of breast. However, such procedures seem to be overly aggressive for a benign disease. [8]. Kuflik and al described successful treatment with cryosurgery [9].

The prognosis of AN is excellent. A complete adequate excision of the lesion is curative without any risk of recurrence or development of malignancy. At the opposite, recurrence can occur if initial excision is incomplete [7, 9].

The majority of nipple adenomas are entirely benign, although rare examples have shown coincidental presentation with breast carcinoma [10].

Our patient is one of the rare men specimens. Curiously, the adjacent skin of the nipple was no ulcerated despite the tumour size. Concerning the treatment, our surgical team chooses the option of complete resection of the nipple, conserving the areola, with an immediate reconstruction. The histological examination of the excised nipple showed a complete histological resection. Thirteen months later, the follow-up didn't show any recurrence

Although AN is a rare disease, this diagnosis should be evocated in case of mass's nipple in man.

References

1. Jones DB. Florid papillomatosis of the nipple ducts. Cancer 1955; 8: 315–19

2. Montemarano AD, Sau P, James WD. Superficial papillary adenomatosis of the nipple: a case report and review of the literature. J Am Acad Dermatol 1995; 33:871-5.

3. Ishii N, Kusuhara M, Yasumoto S, Hashimoto T. Adenoma of the nipple in a Japanese man. Clin Exp Dermatol 2007 ;32:448-9.

4. Healy CE, Dijkstra B, Walsh M, Hill AD, Murphy J. Nipple adenoma: a differential diagnosis for Paget's Disease. Breast J 2003; 9: 325-6

5. Moulin G, Darbon P, Balme B, Frappart L. Erosive adenomatosis of the nipple: report of 10 cases with immunohistochemistry. Ann Dermatol Venereol 1990; 117:537-45.

6. Miller L, Tyler W, Maroon M. Erosive adenomatosis of the nipple: a benign imitator of malignant breast disease. Cutis 1997 Feb; 59:91-2.

7. Hye JL, Kee YC. Erosive adenomatosis of the nipple: conservation of nipple by Mohs micrographic surgery. J Am Acad Dermatol 2002; 47: 578–80.

8. Handley RS, Thackray AC. Adenoma of nipple. Br J Cancer 16: 187-194, 1962.

9. Kuflik EG. Erosive adenomatosis of the nipple treated with cryosurgery. J Am Acad Dermatol 1998; 38: 270–1.

10. Kono S, Kurosumi M, Simooka H, Kawanowa K, Takei H, Suemasu K. Nipple Adenoma Found in a Mastectomy Specimen: Report of a Case with Special Regard to the Proliferation Pattern. Breast Cancer. 2007; 14 :234-8.

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