

# Epidermolytic acanthoma of the scrotum\*

## *Acantoma epidermolítico da região escrotal\**

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**Abstract:** The authors present two cases of epidermolytic acanthoma of the scrotum in two men who are 52 and 68 years old, with 21 and 5 lesions, respectively, all asymptomatic. Pathological analysis was characteristic, showing epidermal hyperplasia with epidermolytic alterations of the superior layers of the stratum spinosum, extending up to the granular layer. Such cases have not been published in Brazil. They were registered with the purpose of calling attention of dermatologists and urologists to a disease that does not seem so rare as it has been claimed to be.

**Keywords:** Acanthoma; Epidermis; Genitalia, male; Scrotum

**Resumo:** São apresentados dois casos de acantoma epidermolítico da região escrotal. Trata-se de homens com 52 e 68 anos de idade, tendo 21 e cinco lesões, respectivamente, todas assintomáticas. O exame anatomopatológico foi característico, mostrando hiperplasia da epiderme com alteração epidermolítica da porção superior da camada espinhosa, que se estende até a camada granulosa. Casos como esses não têm sido publicados, até aqui, no Brasil. O registro dos casos foi feito para despertar o interesse de dermatologistas e urologistas por uma afecção que não parece ser tão rara, conforme tem sido afirmado. **Palavras-chave:** Acantoma; Epiderme; Escroto; Genitália masculina

### INTRODUCTION

In 1970, Shapiro & Baraf<sup>1</sup> reported six cases of solitary lesions (scrotum, anus, eyelids, genian region, leg) and one case of multiple lesions (scrotum), whose anatomopathological examination displayed a thickening of mapighian layer (acanthoma) associated to the presence of epidermolytic alterations, at the level of epidermal granular layer. Understanding that this condition had not been described before, they gave it the name of *acanthoma epidermolyticum* (AE).

In the 30 following years, few communications regarding the matter were published,<sup>2,8</sup> which left the impression that this was a quite rare affection. In

spite of this, the authors have observed that, at least regarding the scrotum, it is not so rare. The authors have had the opportunity to observe various patients with that kind of lesion over the last few years, and in two of those a biopsy was performed, allowing confirmation of the diagnosis.

### CASO REPORTS

Both patients had white skin, one of Italian origin, and the other, Arabic. They were 52 and 68 years old, respectively. The first one visited for having noticed the presence of the lesions, with onset two years before, with no alterations since then. The second had not noticed his lesions, which were

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Conflict of interest: None

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sighted during dermatological examination. In both cases, lesions were disseminated in through the scrotum, totalizing 21 in the first and only five in the second patient. They presented as oval or disc-shaped papules, with diameter ranging from two to 6 mm. Surface was absolutely flat and lighter in color than surrounding scrotal skin, light violet, varying from grayish to whitish tone (Figures 1A and 1B). Lesions were asymptomatic, but were developed enough to call the patients' attention. In the first case, first hypothesis was of HPV infection, for which a viral presence demonstration was attempted, with negative result. Anatomopathological examination of this patient displayed characteristic aspect of AE (Figures 2A and 2B), as previously described.<sup>1,9</sup> Previous experience with this first patient allowed for the establishment of a correct clinical diagnosis for the second one, which was later confirmed by anatomopathological exami-

nation.

## DISCUSSION

AE has been described in different locations, namely: eyelid,<sup>1</sup> genian region,<sup>1</sup> leg,<sup>1</sup> anus,<sup>1</sup> back,<sup>4,5</sup> and forearm.<sup>7</sup> There are three previous reports in the scrotal region,<sup>1,3</sup> to which now two more are added.

In the majority of reports, lesions are solitary, but also multiple lesions have been described, especially in scrotum<sup>1</sup> and back.<sup>4,6</sup>

In a patient who had undergone kidney transplantation, therefore immunosuppressed by drugs, hundreds of AE lesions spread throughout scalp, upper and lower limbs, besides multiple vulgar warts and porokeratosis.<sup>7</sup>

Attempts to isolate human papilloma virus (HPV) DNA, in biopsies of AE cases, were negative.<sup>7,8</sup>

Main differential diagnosis of epidermolytic acanthoma is made with HPV warts. This happens for both facial and trunk lesions (similar to plane wart)

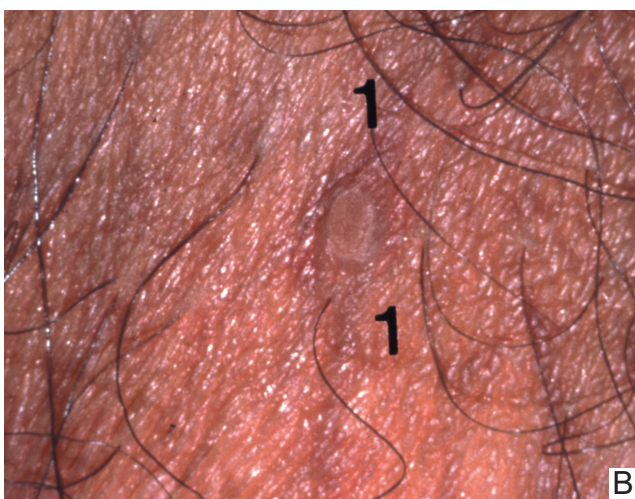
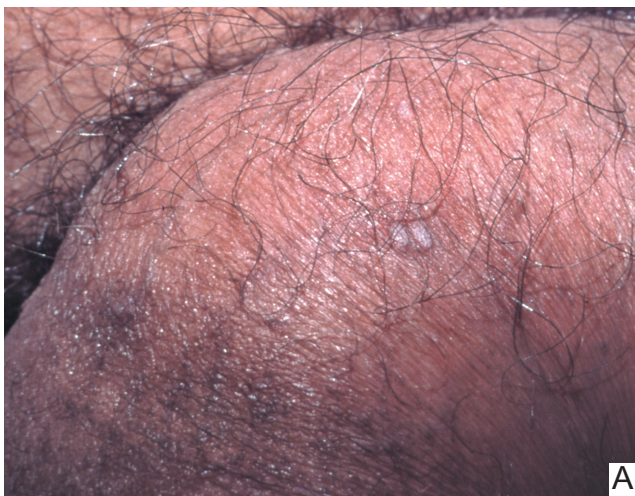


FIGURE 1: Clinic: 1A) Presence of grayish-violet papules in the scrotum 1B) Detail of the same papules

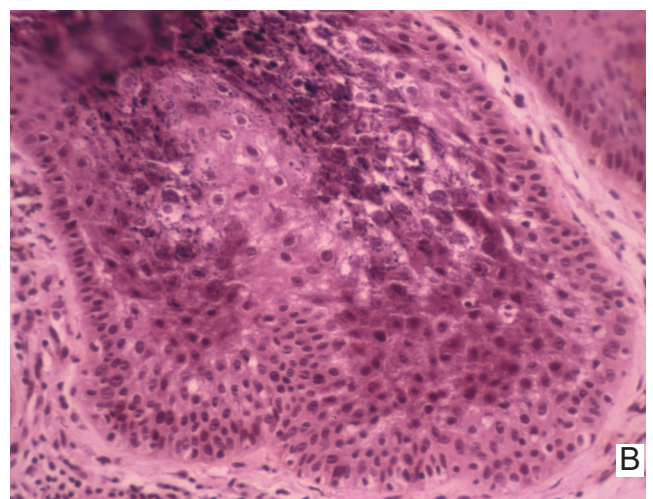
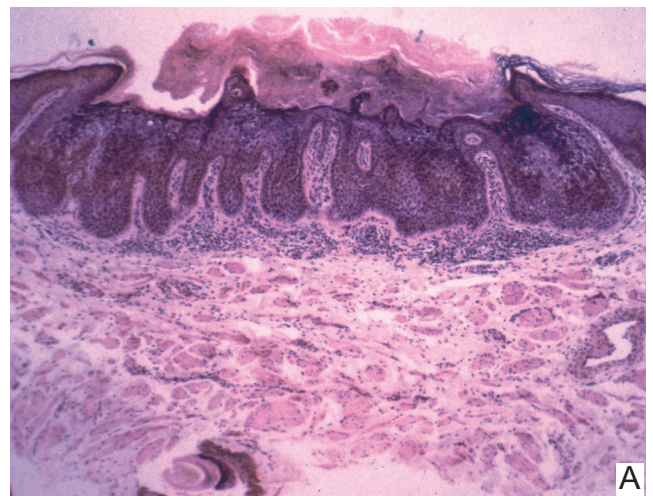


FIGURE 2: Histopathology: 2A) Panoramic view of the acanthotic area (40x HE) 2B) Detail of the epidermolytic area, extending from upper spinous layer to the granular layer (100x HE)

and scrotal ones (similar to condyloma).

From the histopathological standpoint, there is great need in avoiding confusion with the so-called acantholytic acanthoma, in which the main histopathological phenomenon is other, because it is acantholysis and not epidermolytic hyperkeratosis.

Interest in understanding better AE of the scro-

tum has led the authors to organize a research protocol, already ongoing. By means of this, we intend to fixate epidemiological aspects, such as frequency and distribution by age range, and also further knowledge on ultramicroscopic aspects. It is likely that ultramicroscopy contributes to a better understanding of the histogenesis of this curious lesion. □

#### REFERENCES

1. Shapiro L, Baraf CS. Isolated epidermolytic acanthoma. *Arch Dermatol.* 1970;101:220-3.
2. Hirone T, Fukushiro R. Disseminated epidermolytic acanthoma. *Acta Derm Venereol.* 1973;53:393-402.
3. Niizuma K. Isolated epidermolytic acanthoma: a histological study. *Dermatologica.* 1979;159:30-6.
4. Knipper JE, Hud JA, Cockerell CJ. Disseminated epidermolytic acanthoma. *Am J Dermatopathol.* 1993;15:70-2.
5. Metzler G, Sönnichsen K. Disseminierte epidermolytische akanthome. *Hautarzt.* 1997;48:740-2.
6. Sánchez-Carpintero I, España A, Idoate MA. Disseminated epidermolytic acanthoma probably related to trauma. *Br J Dermatol.* 1999;141:728-30.
7. Chun SI, Lee LS, Kim NS, Park KD. Disseminated epidermolytic acanthoma with disseminated superficial porokeratosis and verruca vulgaris in a immunosuppressed patient. *J Dermatol.* 1995;22:690-2.
8. Leonardi C, Zhu W, Kinsey W, Penneys NS. Epidermolytic acanthoma does not contain human papillomavirus DNA. *J Cutan Pathol.* 1991;18:103-5.
9. Lever WF, Schaumburg-Lever G. *Histopatologia da Pele.* São Paulo: Manole; 1991. p.478-9.

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