ID Design 2012/DOOEL Skopje, Republic of Macedonia
Open Access Macedonian Journal of Medical Sciences. 2017 Jul 25; 5(4):545-546.
Special Issue: Global Dermatology
https://doi.org/10.3889/oamjms.2017.119
eISSN: 1857-9655
Clinical Image

Genital Bowen's Disease in a Bulgarian Patient: Complete Remission after Surgical Approach

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Citation: Tchernev G, Lotti T, Wollina U, Gianfaldoni S, Lozev I, Lotti J, França K, Batashki A, Chokoeva A. Genital Bowen's Disease in a Bulgarian Patient: Complete Remission after Surgical Approach. Open Access Maced J Med Sci. 2017 Jul 25; 5(4):545-546. https://doi.org/10.3889/oamjms.2017.119

Keywords: bowen; genital located; imiquimod; surgical approach; complete remission.

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Received: 07-Apr-2017; Revised: 21-Apr-2017; Accepted: 10-May-2017; Online first: 21-Jul-2017

Funding: This research did not receive any financial support.

Competing Interests: The authors have declared that no competing interests exist.

Abstract

A 60-year-old male patient presented with complaints of persistent red to a brown-colored plaque on his scrotum, with duration of approximately three years. The patient had been treated with oral and topical antifungals for inguinal tinea for several months and after that with topical corticosteroids for eczema for several more months. None of the regimens achieved any therapeutic effect. The histopathological evaluation revealed the presence of atypical keratinocytes in all layers of the epidermis with the altered epidermal pattern, spread parabasal mitotic activity, without secondary satellites, multiple dyskeratotic cells and multinucleated cells. The diagnosis of an intraepithelial non-invasive squamous cell carcinoma, associated with koilocytic dysplasia and hyperplasia was made, meeting the criteria for Bowen disease. An elliptic surgical excision of the lesion was made, while the defect was closed with single stitches, with excellent therapeutic and aesthetic result. First described by John T. Bowen in 1912, Bowen disease (BD) represents a squamous cell carcinoma (SCC) in situ with the potential for significant lateral spread. Treatment options include the application of topical 5-flurorouracil cream – useful in non-hairy areas, imiquimod cream or destructive methods such as radiation, curettage, cryotherapy, laser ablation and photodynamic therapy, especially useful in nail bed involvement. Despite the early lesions, surgical excision is the preferred treatment option, regarding the potential malignant transformation risk.

A 60-year-old male patient presented with complaints of persistent red to a brown-colored plaque on his scrotum, with duration of approximately three years. Meanwhile, the patient had been treated with oral and topical antifungals for inguinal tinea for several months and after that with topical corticosteroids for eczema for several more months. None of the regimens achieved any therapeutic effect. Diabetes type I and pancreatic resection because of alcohol-abused mediated chronic pancreatitis were reported from the medical history. A well-demarcated erythematous macule with a brown periphery and well-defined, unregular borders were observed within the clinical examination, affecting the skin of the left scrotal area, close to the left inguinal fold. Two biopsies were performed for clarifying of the lesion's dignity (Fig. 1a). The histopathological evaluation revealed the presence of atypical keratinocytes in all layers of the epidermis with the altered epidermal pattern, spread parabasal mitotic activity, without secondary satellites, multiple dyskeratotic cells and multinucleated cells. The diagnosis of an intraepithelial non-invasive squamous cell carcinoma, associated with koylocitic dysplasia and hyperplasia

was made, meeting the criteria for Bowen disease (Fig. 1d, 1e, 1f). An elliptic surgical excision of the lesion was made, while the defect was closed with single stitches, with excellent therapeutic and aesthetic result (Fig. 1b, 1c).

First described by John T. Bowen in 1912, Bowen disease (BD) represents a squamous cell carcinoma (SCC) in situ with the potential for significant lateral spread [1]. BD most commonly affects the sun-exposed sites, with approximately equal sexual predisposition ratio [2]. The non-sun-exposed areas of the body are usually predominantly affected in darker-skin patients [2]. While the disease usually affects the head and neck in men, the lower limbs and cheeks are most frequently affected in women [3]. Some lesions contained HPV-18 and 18, which are highly associated with genital bowenoid papulosis, with a tendency for spontaneous regression [3]. Despite that, sunlight could also trigger bowenoid lesions, but they are usually referred to the term “bowenoid actinic keratosis” [4].

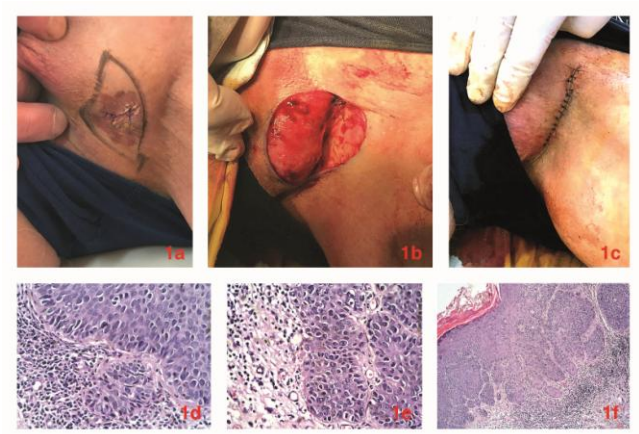

Figure 1: 1a) Clinical manifestation of an erythematous macule with a brown periphery and well-defined, unregular borders, located in the left scrotal area in a 60-year-old male patient. After biopsy; 1b, 1c) Surgical excision. The defect closure with single stitches; 1d, 1e, 1f) Histopathological findings - presence of atypical keratinocytes in all layers of the epidermis with altered epidermal pattern, spread parabasal mitotic activity, without secondary satellites, multiple dyskeratotic cells and multinucleated cells - intraepithelial non-invasive squamous cell carcinoma, associated with koylocitic dysplasia and hyperplasia

The risk of progression to invasive SCC is about 3-5%, as this risk increases up to 10% in genital localisation, as the scrotal SCC is the most common form of it [5]. The presence of ulceration or nodular formation is indicative of malignant transformation, but at later stages [3]. In the past, the association between BD and internal malignancies had been described to vary between 15 and 70% in different studies, as it was mostly reported in a patient with arsenic-induced BD [4]. Nowadays, the disease is not considered as paraneoplastic in general [5].

Treatment options include the application of topical 5-flurorouracil cream – useful in non-hairy areas, imiquimod cream or destructive methods such as radiation, curettage, cryotherapy, laser ablation and photodynamic therapy, especially useful in nail bed involvement [2]. Despite the early lesions, surgical excision is the preferred treatment option, regarding the potential malignant transformation risk [2]. The especially essential diagnostic clue is the presence of koilocytosis in the histological slides, which indicate underlying HPV-infection and further required a surgical excision, instead of the available topical treatment options. The reported case is representative for the importance of biopsy performance in all lesions of unclear dignity, with regret to avoiding diagnostic and therapeutic mistakes which could cost patients’ life. The time needed for misdiagnosis and treatment mistakes is potentially enough for an invasion of the BD into the dermis and malignant transformation into invasive SCC, with an aggressive course and high metastasis rate, which worsens the prognosis and survival rate [4].

References

1. Reizner GT, Chuang TY, Elpern DJ, Stone JL, Farmer ER. Bowen's disease (squamous cell carcinoma in situ) in Kauai, Hawaii. A population-based incidence report. J Am Acad Dermatol. 1994; 4:596-600. https://doi.org/10.1016/S0190-9622(94)70222-5

2. Al-Dawsari NA1, Raslan W, Dawamneh MF.Pigmented Bowen's disease of the penis and scrotum in a patient with AIDS. Dermatol Online J. 2014; 20(4):22337. PMid:24746300

3. Kossard S, Rosen R. Cutaneous Bowen's disease. An analysis of 1001 cases according to age, sex, and site. J Am Acad Dermatol. 1992; 27(3):406-10. https://doi.org/10.1016/0190-9622(92)70208-W

4. Vyas R, Zargar H1, Trolio RD, Di Lorenzo G, Autorino R. Squamous cell carcinoma of the scrotum: A look beyond the chimneystacks. World J Clin Cases. 2014; 2(11):654-60. https://doi.org/10.12998/wjcc.v2.i11.654 PMid:25405188 PMCid:PMC4233419

5. Jaeger AB, Gramkow A, Hjalgrim H, Melbye M, Frisch M. Bowen disease and risk of subsequent malignant neoplasms: a population-based cohort study of 1147 patients. Arch Dermatol. 1999; 135(7):790-3. PMid:10411153