Verrucous Bowen's disease in a black patient

A case report

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Summary

A rare verrucous form of Bowen's disease in a black subject is presented. Bowen's disease is extremely rare in blacks, but when it does occur, it tends to present in an atypical fashion.


Bowen's disease usually presents as an erythematous, flat, slightly scaly lesion with a sharp, but irregular outline. Variants of Bowen's disease such as multicentric pigmented Bowen's disease or fungating forms are extremely rare. This report is apparently the first of a verrucous form of this disease and is further notable for its occurrence in a black patient.

Case report

A 70-year-old black man presented with a 10-month history of a progressively enlarging lesion on the abdomen, immediately above the umbilicus. There was no history of arsenic ingestion or exposure. The large circular lesion measured 12 x 15 cm, was pruritic and bled when subjected to minor trauma (Fig. 1). The lesion had numerous prominent verrucous areas. One such area measured over 1.5 cm at its highest point. The border was sharply defined and areas of black and brown-black pigmentation were present at the periphery. No other skin disease was present.

Results of systemic examination were normal, and no haematological or serum abnormalities were noted. The lesion was excised and covered with a split-skin graft.

Pathological findings

Histopathological examination (Fig. 2) revealed a marked degree of acanthosis, hyperkeratosis, parakeratosis and prominent papillomatosis. The rete ridges were widened, and in some areas the dermal papillae were reduced to thin strands. Throughout the epidermis, periodic-acid-Schiff-positive diastase-labile cells were found lying in absolute disorder. Many atypical and dyskeratotic forms were noted and some of the cells showed vacuolisation. The border between the epidermis and the dermis was well defined. The dermis had a moderate infiltrate of chronic inflammatory cells. Melanin pigment was present in large amounts in the lower epidermis, the papillary dermis, and the reticular dermis, where melanin-laden macrophages were also seen (Fig. 3).

Discussion

This case is noteworthy for its occurrence in a black subject as well as its large, atypical verrucous and pigmented appearance.

Bowen's disease has long been reported to be extremely rare in black subjects. Herold and Cooper reported that no cases of Bowen's disease in blacks had been described. In 1982, Rosen et al. reported 7 cases of Bowen's disease occurring in blacks, 6 of which had the classic appearance of Bowen's disease, and 1 which appeared as bowenoid papulosis. In southern Africa, the disease seems to be even rarer, only 1 case being found in three extensive studies of South African blacks. Leibowitz et al. reported a black patient with a fungating form of Bowen's disease.
Pigmentation in the lesion of Bowen’s disease is also unusual. Burket noted that pigmented Bowen’s disease had not been described outside the groin area. A pigmented variant of Bowen’s disease, multicentric pigmented Bowen’s disease (MPBD), does exist (see page 525, this issue) but is confined to the groin and has a characteristic velvety surface. Hyperkeratotic, verrucous forms of MPBD, however, have not been reported.

This is the first description of the verrucous form of Bowen’s disease in a black subject. A mild degree of hyperkeratosis is usual in histological studies, but the marked degree seen in this case was striking. The fungating form of Bowen’s disease described by Leibowitz et al. was also characterised by marked hyperkeratosis and parakeratosis of the epidermis, but the authors believed that this was due to the coexistence of a basal cell carcinoma with sebaceous differentiation. No evidence, however, of a coexisting basal cell carcinoma could be demonstrated in our case.

The association of Bowen’s disease and visceral malignant tumours is well recognised, although the exact incidence remains a matter of dispute. Thus, Whiting found 1 such case in a review of 33 cases of Bowen’s disease in South African whites, whereas others have reported a much higher incidence. No evidence of underlying malignancy could be demonstrated in this case, but it has been noted that extracutaneous malignant tumours appear on average 6–10 years after the initial diagnosis of Bowen’s disease.

This case again suggests that Bowen’s disease in black subjects tends to present in an atypical fashion.

REFERENCES