Giant pigmented Bowen's disease: A rare variant at a rare site

Sir,

Bowen's disease (BD) is an intraepithelial squamous cell carcinoma (SCC) *in situ* with a potential for invasive malignancy. Although it has a propensity to occur in sun-exposed areas, other unusual sites are also described.[1] BD is unusual in the pigmented skin and the pigmented variant of BD occurs in less than 2% of cases.[2] Etiology of BD is not clearly understood but various strains of human papilloma viruses, arsenic exposure, and immune suppression have been considered as the risk factors.[3,4] Lesions arising in scars have been described.[5] Three to five percent cases of BD have a risk of developing SCC; metastasis may occur in 1/3 of these invasive tumors.[6] We describe an unusual case of giant pigmented BD over an atypical site.

A 68-year-old male presented with a gradually progressing, asymptomatic plaque over the left lower abdomen of 25 years duration. He had applied topical herbal medications with no improvement. There were no medical co-morbidities or excessive sunlight exposure or exposure to arsenic, radiation or underlying immunosuppression. There was history of constant friction at the waistline due to tying of *dhoti*, a traditional outfit of south India. Cutaneous examination revealed a well defined, hyperpigmented, scaly, verrucous, irregular plaque with a central area of depigmentation measuring about 11 × 5 cm [Figure 1]. Differential diagnoses of Bowen's disease, basal cell carcinoma, and lupus vulgaris were considered. An edge biopsy sent for histopathological examination revealed hyperkeratosis, acanthosis, and irregular elongation of rete ridges with thinned out papillae. Scattered dyskeratotic cells having homogenous eosinophilic cytoplasm and hyperchromatic nuclei were noted imparting a windblown appearance [Figure 2]. Focal areas of dysplasia were noted with a few atypical cells having hyperchromatic nuclei with an intact basement membrane. Scattered melanin pigment was observed within the cytoplasm of the atypical keratinocytes. [Figure 3]. The deeper dermis revealed mild to moderate perivascular chronic inflammatory infiltrate. Multiple sections did not reveal features of SCC. A final diagnosis of pigmented type of Bowen's disease was thus confirmed.

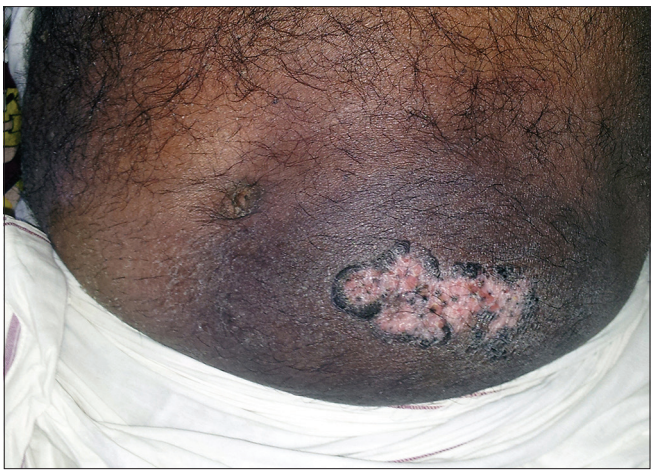

Figure 1: Well-defined, hyperpigmented, scaly, verrucous, irregular plaque with a central area of depigmentation measuring about 11 × 5 cm

In 1912, John T. Bowen described Bowen's disease as a form of *in situ* SCC, with a potential to progress to invasive carcinoma.[7] Histopathologically, it is characterized by the "windblown" pattern of the epidermis, with loss of polarity and presence of nuclear atypia and mitotic figures.[7] Various treatments including topical imiquimod or 5-fluorouracil, cryotherapy, surgical excision, electrocautery, photodynamic therapy, lasers, and Mohs micrographic surgery have been attempted.[1,2] Excision and primary closure was relatively easy in our patient as a rapid treatment. Cosmetic outcome was not a major consideration for the patient because the lesion was situated in a covered area. Surgical excision was hence chosen ahead of other options such as cryotherapy and topical 5-fluorouracil.[8]

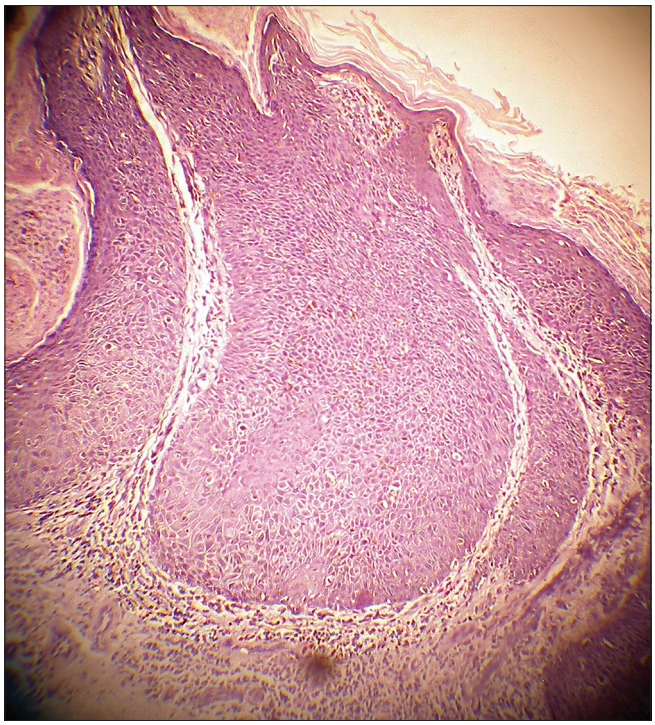

Figure 2: Scattered dyskeratotic cells having homogenous eosinophilic cytoplasm and hyperchromatic nuclei giving a windblown appearance (H and E ×400)

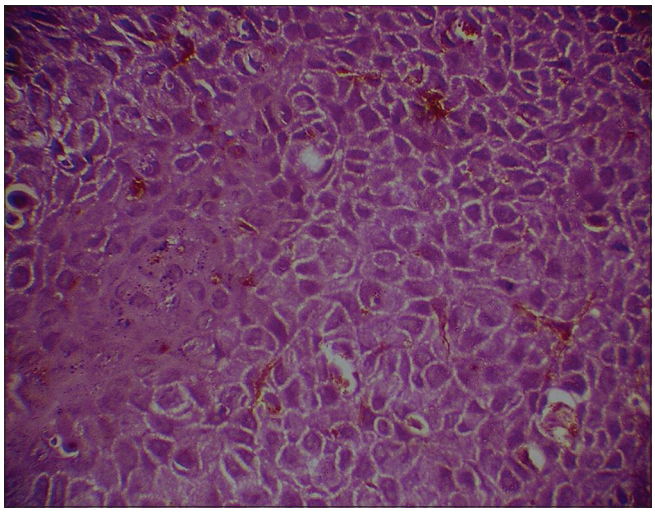

Figure 3: Scattered melanin pigment seen within the cytoplasm of the atypical keratinocytes (H and E ×400)

BD in sun protected areas of the body is a rare occurrence. It was also a giant lesion (11 × 5 cm) that did not progress to malignancy despite its chronicity. It also occurred at the friction prone site of the waistline due wearing of the *dhoti,* a traditional garment of south India, hence making it a possible cultural dermatosis. Many waistline dermatoses due to wearing of tight garments such as saree/petticoat have been reported but not Bowen's disease,[9] making our case unique.

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Conflicts of interest

There are no conflicts of interest.

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