

BOWEN'S DISEASE OF MULTICENTRIC ORIGIN

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We describe a case of Bowen's disease who developed multiple lesions, despite an absence of definite predisposing factors or an association with internal malignancy. The case is reported for this unusual feature for its rarity among the Indians.

Key Word : Bowen's disease

Introduction

Bowen's disease is a clinically persistent, progressive red scaly or crusted plaque which is due to intraepidermal carcinoma and is potentially malignant. Sunlight and arsenical exposure are considered to be the important predisposing factors. Associations have been reported with the internal malignancies.^{1,2}

Case Report

A 45-year-old male presented with a 12 years history of erythematous crusted plaques on his abdomen and left thigh. The first lesion to appear was on the abdomen which was followed four years later by the lesion on the left thigh (Fig.1). Despite having availed of various

treatments, the lesions had relentlessly but insidiously progressed.

Examination revealed the lesions to be plaques; which were slightly infiltrated, and nodular at places. These were non-tender and unattached to the underlying deep fascia or muscle. There was no regional lymphadenopathy. The patient was otherwise in good general health and systemic examination revealed no abnormality. His X-ray chest, barium follow-through, barium meal, USG abdomen, haemogram, blood chemistry were normal.

Biopsies from each of the lesions were pathognomonic. An abundance of atypical cells with hyperchromatic nuclei and loss of polarity gave the massively acanthotic epidermis the classical "wind-blown appearance" (Fig.2). The upper

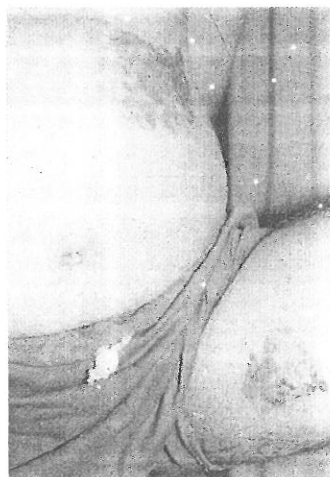


Fig.1. "Multicentric" lesions of Bowen's disease

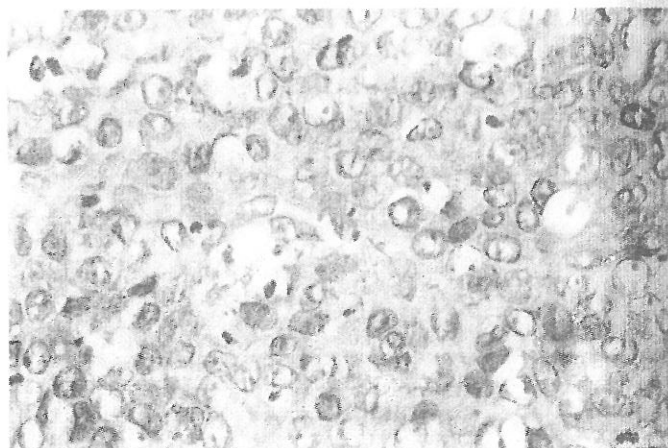


Fig.2. 'Wind blown' appearance showing atypical cells with hyperchromatic nuclei and loss of polarity

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dermis contained a sparse non-specific inflammatory infiltrate but was sharply delineated from the typical epidermis with no evidence of invasion even in serial sections.

Comments

Bowen's disease is an uncommon precancerous condition,³ which presents with the cutaneous lesions of long duration, unresponsive to topical or systemic treatment with steroids or antimicrobial agents. Such was the case in our patient too, in whom the lesions progressed relentlessly for 14 years despite various topical medicaments.

Although the aetiology of Bowen's disease is obscure, chronic sun exposure and/or arsenic are known to be predisposing factors.⁴ Our patient being an office clerk working indoors who had lesions on the covered areas; ruled out sun exposure as a precipitating factor. A detailed history relevant to arsenical exposure (contact with fungicides, weed-killers, pesticides, occupational hazard in smelting industries, ingestion of arsenic containing mixture for eczema or psoriasis, etc.) also proved inconclusive.

We also investigated this case for internal malignancy. Such an association of Bowen's disease is found to be controversial in literature. However, association with the carcinoma of lung, bladder papillomas have been reported.^{2,5} Relevant investigation in our case excluded such a possibility.

The presence of two lesions developing in succession on entirely unrelated anatomic sites (abdomen and thigh) was the most unusual feature of our

case. Though multiple lesions have been described, they have been in close proximity or have later become confluent. The absence of a common precipitating factor, absence of histological invasion and the absence of lymph node metastasis make it unlikely that the second lesion (on the thigh) was a metastasis from the first. Thus, Bowen's disease in our patient seemed to have a "multicentric" origin which is although reported, is very rare.⁶

Of several modalities of treatment for Bowen's disease, 5-FU proved to be an easy, acceptable and effective treatment in our patient. 5% 5FU was applied topically. Twice weekly applications were done for initial 4 weeks; followed by daily application for the next 8 weeks. At the end of 8 weeks therapy the infiltrations, nodularity and crusting resolved. The patient is now being followed for further evidence of deeper invasion or appearance of internal malignancy (Bowen's disease may sometimes predate this).

Bowen's disease is infrequent amongst caucasians, and is definitely rare in Indians. Probably, this would be the first report of Bowen's disease of multicentric origin in Indian literature.

References

1. Anderson SLC, Neilsen A, Reymann F. Relationship between Bowen's disease and internal malignant tumours. Arch Dermatol 1975; 108 : 367-70.
2. Arbesmann M, Ranshoff DF. Is Bowen's disease a predictor for development of internal malignancy? A methodical critique of the literature. J Am Med Assoc 1987; 257:516-8.
3. Bowen JT. Precancerous skin lesions. Cutan Diseases 1980; 30: 1-10.

4. Graham JH, Mazzanti GR, Hewig EB. Chemistry of Bowen's disease; relationship to arsenic. *J Invest Dermatol* 1961; 372 : 317-32.
 5. Lycta BAS. Bowen's disease and internal
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- malignancy. A metanalysis. *Int J Dermatol* 1989; 28: 531-3.
6. Sanderson KV. Multicentric pigmented Bowen's disease. *Proc Roy Soc Med* 1974; 67 : 23-4.