BOWEN'S DISEASE
(Case Report)

L. K. BHUTANI, R. K. PANDHI, D. S. RAO AND A. S. KUMAR

Summary

A case of Bowen's disease with adenocarcinoma of the lung, probably the first to be reported from India, is presented. The rarity of this disease in India is highlighted.

Bowen's disease is not an uncommon premalignant lesion of the skin. Large series have been reported by McGovern[1] and Graham & Helwig[2]. Graham and Helwig[3] and Peterka et al[4] reported the association of Bowen's disease with primary systemic malignancies. Such associations have been described from different parts of the world, such as Australia[1] and the United States of America[3]. A study of 207 patients with Bowen's disease from Denmark, however, failed to reveal any association between Bowen's disease and systemic malignancy[5]. The purpose of the present communication is to highlight some of the unusual features of Bowen's disease, such as multiplicity of lesions, associated malignancy of lung which appeared 29 years after the detection of Bowen's lesions and associated benign (Neurofibroma, seborrhoeic keratosis), premalignant (solar keratosis) and malignant (squamous cell carcinoma) skin lesions.

Case Record

A 62 year old grain - merchant presented with a 30 year history of asymptomatic hyperkeratotic lesions on the soles. Similar lesions on the palms and red scaly plaques on the trunk appeared about twenty years ago. He had no constitutional symptoms. There was no history of accidental or medicinal consumption of arsenic. No other member of the family or community had similar lesions. Patient was a heavy smoker.

The patient was a well-built, slightly anaemic individual who had pale-yellow discrete papules and plaques on the palms (Fig. 1). On the trunk he showed a number of irregular circinate, red, scaly psoriasiform lesions on the front and the back (Fig. 2). Some of the lesions had atrophic, others, normal skin in the middle. In addition, the patient had multiple hyperkeratotic darkly pigmented lesions on the trunk and some that were dome-shaped, pigmented and greasy. At the time of first admission systemic examination was normal. A meticulous and detailed investigation to exclude the presence of an associated malignancy did not yield any positive result. The patient reported for a follow - up seven months after first admission and had by then developed an ulcerated lesion on the dorsum of the left middle finger with axillary lymphadenopathy on the same side. An X-ray of the chest

Address for correspondence :
L. K. Bhutani, M.D.
Head, Department of Dermato-Venereology
All India Institute of Medical Sciences
New Delhi 110016
Received for publication on 17—9—1979

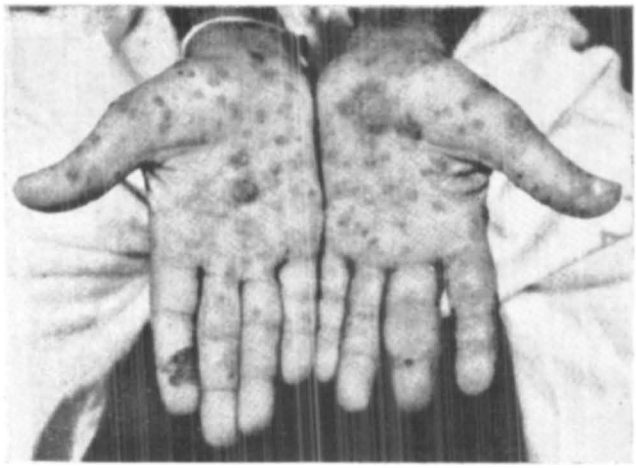

Fig. 1 Showing pale yellow discrete papules and plaques on the palms.

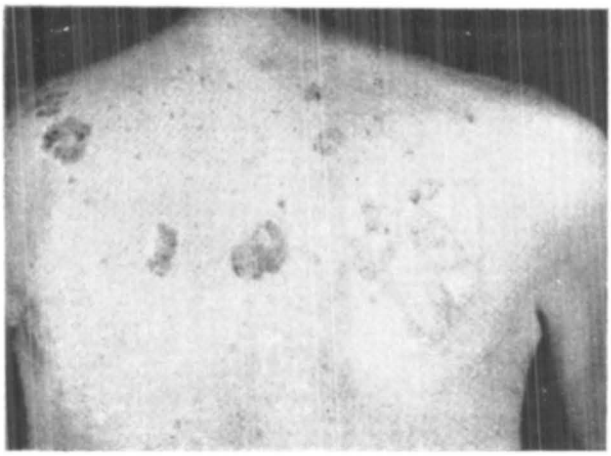

Fig. 2 Showing irregular, red psoriasiform lesions on the back.

revealed the presence of nodular opacity in the right apex. Rest of the clinical examination was normal.

Examination for arsenical content of the hair, nail and the skin was negative on two occasions. Individual biopsies of different types of lesions revealed histology of senile keratoses, seborrhoeic keratosis, Bowen's disease (Fig. 3), squamous cell carcinoma and neurofibroma. The axillary lymph nodes revealed metastases from a squamous cell carcinoma. Sputum cytopathology showed a fragment shed off from a poorly differentiated adenocarcinoma along with marked inflammation. The patient is being given chemotherapy with cyclophosphamide.

Comment

Bowen's disease is relatively uncommon in the pigmented people even though reports are available in Negroes, American Indians, Latin Americans as well as Orientals. It is apparent, however, that the disease has a predilection for sun-sensitive individuals of Anglo - Saxon ancestory[6]. A single report from India also attracted our attention[6]. While we doubt if Bowen's disease is as uncommon as the lack of reports in literature would indicate personal enquiry from most of the senior dermatologists in this country confirmed the rarity of this disorder. There is, to our knowledge, no previous report of association of Bowen's disease with primary systemic malignancy from this country. The other unusual, though not unknown, features are multiplicity of the lesions and association with a number of benign cutaneous lesions such as seborrhoeic keratoses, neurofibroma, premalignant lesions such as keratoses or frank squamous cell carcinoma. The differentiation of this clinical picture of Bowen's disease from arsenical keratoses both clinically

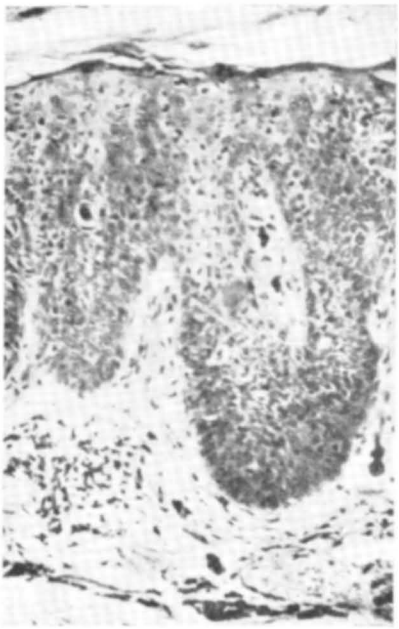

Fig. 3 Showing acanthosis, dyskeratosis and mild inflammatory infiltrate in the dermis. H & E, 40X

and histologically is extremely difficult. One wonders why arsenical keratoses and Bowen's disease are not more frequently met with in India since arsenic is used in fair amounts in the indigenous and till recently even in the modern system of medicine. Ironically, dermatologists in the past would seem to be the biggest culprits who dispensed Fowler's solution for psoriasis and other erythematosquamous disorders.

References

1. McGovern VJ : Bowen's disease, Aust J Derm, 8 : 48, 1965.
2. Graham JH and Helwig EB: Bowen's disease and its relationship to systemic cancer, Arch Derm, 83 : 738, 1961.
3. Graham JH and Helwig EB : Bowen's disease and its relationship to systemic cancer, Arch Derm, 80 : 133, 1959.
4. Peterka ES, Lynch FW and Goltz RW : An association between Bowen's disease and internal cancer. Arch Derm, 84 : 623, 1961.
5. Anderson LS and Nielson A : Relationship between Bowen's disease and internal malignant tumors, Arch Derm, 108 : 367, 1973.
6. Graham JH, Helwig EB : Advances in biology of skin. Ed Pergamon Press, London, 1966, P 278
7. Jalihali SV and Bhat PA : Bowen's disease. Indian J Derm Vener, 28 : 33, 1962.