

## **Bowen's Disease**

(A Case Report)

\*DR. S. V. JALIHALI, M.D.,

Department of Pathology,  
Medical College, Baroda.

DR. B. A. SAYED, M.D.  
Department of Pathology,  
Medical College, Baroda.

and

DR. P. A. BHATT, H.S.,

Department of Surgery,  
Medical College, Baroda.

The term Bowen's disease has been given to a special type of tumour of the skin arising intraepidermally after Bowen<sup>1</sup> who first described the condition in 1912. This condition is included under 'Precancerous dermatoses' affecting middle aged or elderly people.

As very few cases of Bowen's disease are reported the present case justifies its publication.

There are a number of similar condition which resemble histologically Bowen's disease and hence requires careful evaluation. They are chiefly extramammary Paget's disease, intra-epidermal basal cell carcinoma, chronic radio-dermatitis, advanced lesions of arsenical keratitis and keratitis senilis.

Extramammary Paget's disease closely resembles Bowen's disease. The Paget's cells are rich in glycogen and has been demonstrated by Arnd<sup>2</sup> by Best's<sup>3</sup> method. Inglis<sup>4</sup> considers Bowen's disease as fundamentally different from extramammary Paget's disease. In Bowen's disease the changes are seen in epidermal cells whereas in Paget's disease there is an intraepidermal spread of cancer. Microscopically, no such differentiation can be made. Highman and Mount<sup>5</sup> have convincingly argued that the lesion is cancerous from the beginning. This may necessitate a radical surgery.

Bowen's disease starts as a single or multiple patches in any part of the skin or mucosa in middle-aged or elderly subjects of either sex. There is slightly raised reddish brown papular plaquelike lesions. Crusting is a regular feature in Bowen's disease.

### CASE REPORT

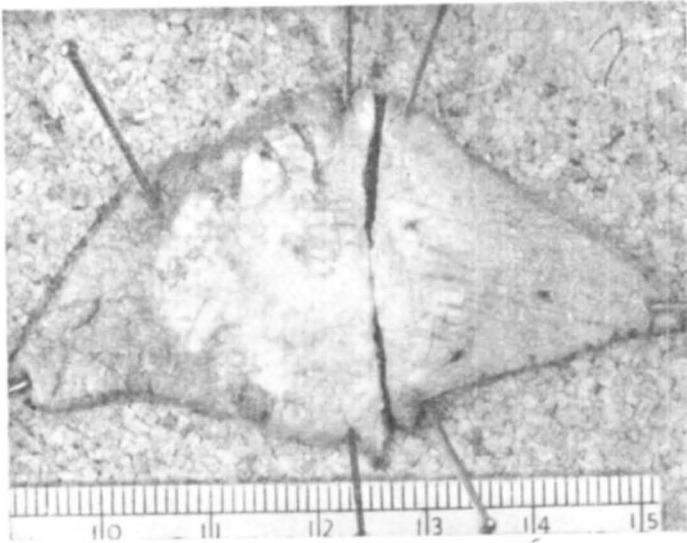
A hindu female aged 70 years was admitted to the S.S.G. Hospital Baroda, for an irregular patch on the skin of the size of 5 cms. by 2.5 cms. on the medial aspect of the right thigh. Duration of the patch was two years. It started as a single small patch which enlarged to the present size. There is crusting in the patch. The patch was clinically diagnosed as haemangioma.

---

\* Present Address: Department of Pathology, M. P. Shah Medical College, Jamnagar.

On gross examination the excised tissue consists of a piece of skin of the size of 6 cms. 3 cms. On the surface of the skin is seen an irregular patch of 5 cms in size, granular looking and showing irregular projections. Whitish discoloration and crusting is seen in the patch. A piece of tissue from the central portion given for section.

Microscopically, haematoxylin and eosin stained section shows thickening of the epidermis and hyperkeratosis. The basal layer is intact. The cells of the malpighian layer are arranged in disorderly fashion. They are atypical and show hyperchromatic nuclei and numerous mitotic figures. In the dermis are seen round cell infiltration.



## DISCUSSION

In Bowen's disease there may be hyperkeratosis or parakeratosis and acanthosis. The papillae are absent or thinned out because of thickening and elongation of the rete pegs. Malpighian layer shows complete disorder. However, the basal layer remains intact. Many typical multinucleated cells are commonly encountered. The principle feature of this lesion is the occurrence of isolated dyskeratotic cells scattered haphazardly in all layers of the epidermis. These cells are large with single or double nuclei surrounded by cytoplasmic halos. Mitotic figures are numerous in these cells.

Various structures in the skin are named as to the origin of Bowen's disease. Sebaceous glands, sweat glands and apocrine sweat glands have been assumed. But there are no satisfactory evidences, Bowen's disease has been said to represent delayed nevus. If the lesion is allowed to progress it invariably develops into a squamous cell carcinoma. Schubert<sup>15</sup> has reported a case in which invasive carcinoma developed as a result of trauma. When the basal layer is broken a true invasive carcinoma is seen.

The present case fits in fairly well with the typical description of Bowen's disease. The duration of the disease is of two years. In Bowen's disease the duration usually runs over many years.<sup>17, 18, 16</sup>

The age of the patient in the present case is 70 years and is within the range described by Willis<sup>17</sup> Ormsby<sup>18</sup> and Sutton.<sup>16</sup>

The gross appearance shows raised reddish papular plaque like lesion. Crusting in the plaque is seen very clearly in the present case, as is the usual and constant feature of Bowen's disease.

Microscopically, the present case shows little of hyperkeratosis and acanthosis. Few cells resembling Paget's cells are seen distributed in the epidermis. The basal layer is intact.

All these findings are consistent with Bowen's disease.

## SUMMARY

The clinical features, gross and microscopic appearance of a case of Bowen's disease are discussed.

## ACKNOWLEDGEMENT

We express our thanks to Dr. J. D. Pathak, M.D., Dean, Medical College, Baroda, for permission to publish this paper.

## References:

1. Anderson, W. A. D.; Pathology, page 1161.
2. Arnd: Quoted by Willis.
3. Best: quoted by Willis.
4. Bowen, J. T.: precancerous dermatoses, J. Cutan Dis. 30: 241, 1912; 33: 787, 1915, quoted by Willis.
5. Brighton and Altmann: quoted by Sutton.
6. Caseio, G.: Bowen's disease of conjunctiva; Clinical and histologic study. Rass. ital O Hal 25; 44-45. Jan.-Feb., 56 I.

7. Cheatele and Cutler: quoted by Willis.
8. Highman and Mount: quoted by Willis.
9. Inglis, K (1946) Amer. J. Pathology, 22, 1: quoted by Willis.
10. Khanolkar, V. R. (1946) Amer. J. Ophth., 29, 515.
11. Knight and Jeffercoate: quoted by Willis.
12. Lever: Histopathology of skin pp. 336-338.
13. Ormsby. O. S.: Disease of the skin, Lea & Febzer, Philadelphia, 1954, pp. 844-846.
14. Reich: quoted by Willis.
15. Schubert: quoted by Willis.
16. Sutton, Richard. H.: Disease of the skin, The C. V. Mosby Company, St. Louis, 1956, pp. 1193.
17. Willis: Pathology of Tumours, pp. 287-288.

# SERPINA

*in Dermatological Disorders*

*Rauvolfia serpentina* (SERPINA) is very useful in the treatment of neurodermatitis, pruritus ani and psoriasis as it provides control over the emotional component of the disease.

It can be used as an adjuvant in other pruritic dermatoses.

**Shrinivas N. Ranade,**  
B.Sc., M.B., B.S., D.D.V., F.C.P.S., F.D.S., (London) et al  
Department of Dermatology and Venereology,  
Sassoon Hospitals, Poona

*Paper read at the 33rd All-India  
Medical Conference, Trivandrum.*



**THE HIMALAYA  
DRUG CO.,**  
251, Dr. D. Naoroji Road,  
BOMBAY I. (India)