

## ADENOCARCINOMA OF THE SEBACEOUS GLAND

SUDHA NARANG\* AND GAURI BAZAZ MALIK†

### Summary

A case of sebaceous gland adenocarcinoma arising from the back of the trunk of a 36 years old male has been described. The tumor is rare and has to be differentiated from sebaceous metaplasia occurring in a basal or squamous cell carcinoma.

Adenocarcinoma arising from a sebaceous gland is rare<sup>1,2</sup>. Under the title sebaceous malignancy Urban and Winkelman<sup>3</sup> have described three types of sebaceous tumors, (1) Sebaceous gland carcinoma (2) Basal cell tumor with sebaceous differentiation (3) Squamous cell carcinoma with sebaceous differentiation. The site, clinical presentation and histological morphology of these three types are quite different which help in the differentiation of these tumors. All these types however are uncommon, the sebaceous carcinoma being the rarest.

### Case Report

A 36 years old male noticed a nodule on the back of the trunk one year before consulting the clinician. The nodule had shown a rapid increase during the last three months. Local examination revealed an ulcerating pedunculated mass arising from the skin. A provisional clinical diagnosis of dermatofibrosarcoma was made and the mass including the skin at the site of origin was excised.

\* Demonstrator in Pathology,

† Professor & Head of the  
Department of Pathology,  
Lady Hardinge Medical College,  
New Delhi.

Received for Publication on 23—3—1976

Pathology:—Grossly the specimen comprised of a pedunculated mass measuring 6 x 5 x 5 c.m. which had ulcerated at the surface (Fig. 1 Page No. 196). On cutting it revealed a homogenous yellow soft tissue with pin point haemorrhages. Peduncle was short and narrow separating the mass from a flap of skin. Microscopically the tumor was seen arising from the deeper dermis, had broken through the epidermis and was covered by an acute inflammatory exudate. Deeper portions of the tumor comprised of lobules of compactly arranged sheets of cells (Fig. 2 Page No. 196). The cells towards the periphery were large, oval with round vesicular nuclei and plenty of pale blue cytoplasm. These cells showed fair number of mitosis. The maturation of these cells proceeding towards the centre of the groups and lobules could be judged by the gradual change of the cytoplasm from granular pink to foamy vacuolated type and pyknosis of the nuclei. Groups of cells infiltrating the surrounding connective tissue and occasionally occupying small venules were observed. A foreign body granulomatous reaction was seen around clumps of heterotopic calcium present in the connective tissue of the capsule. No basal or squamous type cells were observed. On the basis of the gross

and microscopic picture the tumor was labelled as sebaceous gland carcinoma.

### Comments

Sebaceous gland adenocarcinoma is a rare tumor which usually develops in persons past middle age, the most common site being the face. Tumors arising from the meibomian glands of the eyelid behave in a much more aggressive manner than tumors elsewhere<sup>2</sup>. The tumor is characterized by the presence of slow growing hard yellow nodule located either on the face or scalp with extension, ulceration and at times metastasis<sup>4</sup>. It has to be emphasized that the true sebaceous gland adenocarcinoma arising from the mature sebaceous gland should not be mistaken for sebaceous metaplasia of the basal or squamous cell carcinoma<sup>5</sup>. Pinkus<sup>6</sup> has demonstrated and emphasized the pluripotency of all cutaneous epithelium which may be responsible for sebaceous metaplasia of some of the tumors arising from cutaneous epithelial elements. Sebaceous cell metaplasia is known to occur in the basal and squamous cell tumors, but these tumors have a distinctive morphological pattern, and therefore can easily be differentiated from sebaceous gland adenocarcinoma. Each of these tumors also differs as far as the site, metastatic behaviour and prognosis are concerned.

Sebaceous adenocarcinoma is comprised of illdefined lobules of varying size; variable number of recognisable sebaceous cells serve to identify the tumor. Pleomorphism and polychromasia of both cells and nuclei are usually striking. Present tumor comprised of tumor lobules with a great variation in the size of the cells and nuclei. At

the periphery most of the cells were undifferentiated tending to infiltrate neighbouring connective tissue and vessels. Towards the centre of the lobules grades of differentiation of these cells into typical sebaceous cells was present.

In one case studied by Urban and Winklemann<sup>3</sup> there was an inflammatory reaction around the tumor comprising of lymphocytic plasma cells. In the present case foreign body granulomas around the calcium clumps in the tumor capsule were observed. This reaction may possibly be the result of the lipid sebaceous material diffusing out and initiating dystrophic calcification followed by a granulomatous reaction.

### Acknowledgment

The authors are grateful to the clinician who provided the material and the Principal, Lady Hardinge Medical College, New Delhi, for permission to report this case.

### REFERENCES

1. Lever WF: Histopathology of Skin, 4th Ed, Lippincott, 1961 p 593.
2. Seldam REJ and Helwig EB: Histological typing of Skin Tumors. WHO Series No. 12, Geneva, 1974.
3. Urban FH and Winklemann RK: Sebaceous malignancy, Arch Derm, 84: 63, 1961.
4. Beach A and Severence AO: Sebaceous carcinoma, Ann Surg, 155:158, 1942.
5. Montgomery H: Dermatopathology, Hoeber & Co, 1967, p 915.
6. Pinkus H: Skin Cancer and Basic Research in Dermatology, J Invest Derm, 33:171, 1959.
7. Justi RA: Sebaceous carcinoma. AMA Arch Derm, 77:195, 1958.