ADENOCARCINOMA OF THE SEBACEOUS GLAND
(Report of two cases)

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Summary

Two cases of sebaceous gland adenocarcinoma arising from the scalp have been described. It is a rare tumour and has to be differentiated from sebaceous metaplasia occurring in a basal or squamous cell carcinoma.

KEY WORDS: Carcinoma, Sebaceous gland, Adenocarcinoma

Adenocarcinoma of the sebaceous gland is a rare tumour[1,2]. Urban and Winklemann[3] described three types of sebaceous tumours namely (1) Sebaceous gland carcinoma, (2) basal cell tumour with sebaceous differentiation and (3) squamous cell carcinoma with sebaceous differentiation. Clinically and histologically these three types are quite different. These tumours are however uncommon, the sebaceous carcinoma being the rarest and most malignant of all.

We herein report two cases of sebaceous gland adenocarcinoma without metastases treated at Govt. Medical College & Hospital, Aurangabad.

Case Report

Case No. 1

A forty five years old male noticed a nodule behind the left ear, in the occipital region of the scalp one and half year before his hospital visit. The nodule increased in size rapidly during the two months prior to admission. Local examination revealed an ulcering pedunculated mass arising from the skin (Fig. 1). There were multiple sebaceous cysts on the scalp in the vicinity of the tumour (Fig. 1).

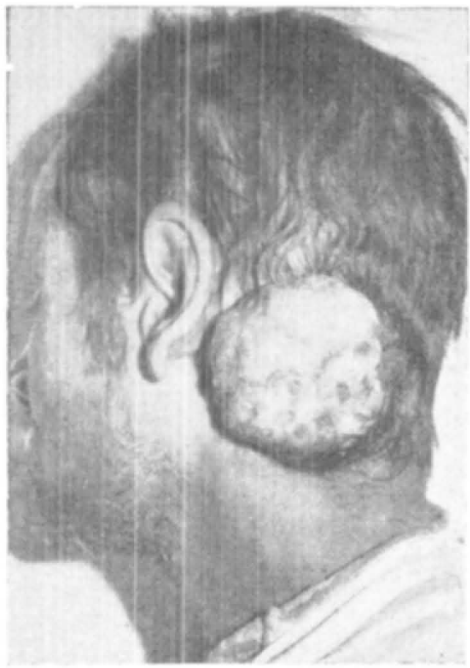

Fig. 1 Shows pedunculated tumour mass just behind the feft ear with sebaceous cyst in the centre of the scalp.

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There was no significant regional lymphadenopathy. A provisional diagnosis of squamous cell carcinoma was made and the mass including the skin at the site of origin was excised. Grossly the specimen comprised of a pedunculated mass of the size of $7 \times 5 \times 5$ cms. which had ulcerated at the surface. On cutting, the tumours revealed a homogenous yellow soft tissue with areas of haemorrhages (Fig. 2).

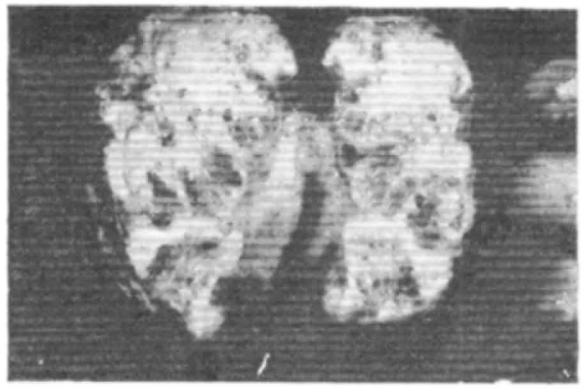

Fig. 2

Bisected specimen shows homogenous yellw soft tissue with areas of haemorrhages. Multiple sebaceous cysts removed from the scalp are also seen.

Case No. 2

A forty years old female complained of a small nodule on the scalp over the right parietal region for one year. The nodule was slowly growing and during the four months prior to admission it had grown rapidly. On examination, an ulcerated mass was seen arising from the skin of scalp (Fig. 3). Regional lymphnodes were normal. The provisional diagnosis of squamous carcinoma was made, and the mass including the skin at the site of origin was excised. Macroscopically it was a sessile growth measuring $5 \times 3 \times 3$ cm. which had ulceration at the surface. Cut section showed homogenous yellow soft tissue with pin point haemorrhages.

Microscopically in both the cases the origin of the tumours was the deeper dermis. The tumour had broken through the epidermis and was covered by an acute inflammatory exudate. In both cases, tumour comprised of tumour lobules with a great variation in the size of the cells and nuclei. In the centre of the lobules, grades of differentiations of these cells into typical sebaceous cell was present, while at the periphery, most of the cells were undifferentiated tending to infiltrate neighbouring connective tissue and vessels.

Histologically both cases were diagnosed to be sebaceous adenocarcinomas. Both the patients were followed for a year. There was no sign of either recurrence or regional or distant metastases during the follow-up period.

Discussion

Sebaceous adenocarcinoma is a rare and very malignant tumour which usually develops in adults. It is characterised by the presence of a slow-growing, hard, yellow nodule located on either the face or scalp, with extension, ulceration, and at times metastasis[4]. Mostly it occurs on the eyelid, where it originates from meibomian glands, which are modified sebaceous glands[5]. The behaviour of this tumour is much more aggressive than that of tumours elsewhere. Widespread metastases are therefore seen in case of eyelid tumours much more than in sebaceous-carcinomas arising elsewhere[6]. Sebaceous carcinomas occurring in association with multiple visceral carcinomas do not tend to metastasize[7]. The true sebaceous gland adenocarcinoma arising from sebaceous gland, is always

Fig. 3 Shows tumour mass with short pedicle over the scalp in a female.

mistaken for sebaceous metaplasia of the basal or squamous cell carcinoma[8]. Pinkus[9] has demonstrated and emphasized the pleuripotency of all cutaneous epithelium which may be responsible for sebaceous metaplasia of some of the tumours arising from cutaneous epithelial elements. Sebaceous cell basal and squamous cell metaplasia is known to occur in the tumours, but these tumours have a distinctive morphological pattern, and therefore can easily be differentiated from sebaceous gland adenocarcinoma. Each of these tumours, also differs as far as the site, metastatic behaviour and prognosis are concerned.

Sebaceous adenocarcinoma is comprised of ill-defined lobules of varying sizes, variable number of recognisable sebaceous cells serving to identify the tumour. Pleomorphism and polychromasia of both cells and nuclei are usually striking. Many of the undifferentiated cells have an eosinophilic cytoplasm and when fat stains are used on frozen section they contain fine lipid globules[10].

The undifferentiated cells of sebaceous carcinoma differ from those of basal cell tumours by showing greater atypicality and a more eosinophilic cytoplasm[4]. In the group classified as squamous cell carcinoma with sebaceous cell differentiation, there is marked hyperkeratosis and acanthosis[3].

In one of our cases, multiple sebaceous cysts were present along with sebaceous adenocarcinoma. It is unlikely that the malignant change occurred in one of the sebaceous cysts, though association of multiple sebaceous adenocarcinoma and multiple visceral tumours are on record. Clinically sebaceous adenocarcinoma can not be differentiated from squamous cell carcinoma.

References

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SELF - ASSESSMENT PROGRAMME

A 10 day old female neonate reported with a few scattered bizarre scaly macules on the limbs, verrucous papules on the trunk and vesicular lesions arranged in linear streaks on the limbs, present since birth. The child was otherwise well and feeding normally. She was the second born to her nonconsanguinous parents after an uneventful gestation. The elder sibling — a 3 year old male — was healthy.

1. The most likely diagnosis in this case would be :

   a. Epidermolytic hyperkeratosis.
   b. Congenital syphilis.
   c. Incontinentia pigmenti.
   d. Pemphigus neonatorum.
   e. Urticaria pigmentosa.

2. What investigations would be of help ?

   a. Blood S.T.S.
   b. Skin biopsy.
   c. Culture of blister fluid.
   d. Tzanck smear.

   The VDRL was negative and blister fluid was sterile.

   The histological features were suggestive of incontinentia pigmenti.

3. What would these features be ?

   a. Intraepidermal vesicles filled with eosinophils.
   b. Sub-epidermal bulla with eosniophils.
   c. Whorling of prickle cells with central dyskeratotic cells.
   d. Epidermis practically nonpigmented with melanophages in upper dermis.
   e. Extensive Basal cell degeneration with pigment incontinence.

4. What other features would you look for ?

   a. Ocular changes.
   b. Dental defects.