

Sebaceous Carcinoma of the Back: Case Report and Review of Literature

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Abstract

A case of sebaceous carcinoma of back is presented. This tumour of the skin appendages requires histopathological diagnosis as its clinical appearance is atypical. Because of the frequency of metastasis to local lymph nodes and bones a careful physical examination and appropriate radiologic and scintigraphic studies of these organs should be performed routinely. The microscopical findings of the carcinoma is described, the clinical behavior, the histological differential diagnosis and suitable therapy are discussed.

Introduction

SEBACEOUS carcinoma is a slowly growing tumor, locally aggressive and capable of metastatic spread [1]. Sebaceous gland carcinomas located outside the ocular adnexa are rare with fewer than 100 documented cases to date. The majority of these arise in the head and neck region where sebaceous glands are plentiful. Because this tumor shows no pathognomonic gross nor clinical characteristics, accurate histologic evaluation is essential for its diagnosis [2].

Regardless of the location, sebaceous malignancies must be considered aggressive neoplasms with a potential for regional and distant metastasis [3].

This is a case report of sebaceous carci-

noma of the back and review of literature outlining the microscopical findings, the histological differential diagnosis, the clinical behavior and the appropriate therapy.

Case Report:

A 50-year old female admitted to the hospital with the following:

- An ulcerated swelling in the midline of the back opposite the first and second lumbar vertebrae, this swelling was 10x7 cm in its maximal dimensions, hard in consistency, with irregular surface, ill-defined edges and it was fixed to the deeper structures. This swelling was of 3 years duration.

- A second swelling was in the back opposite the left renal angle, it was 3x2 cm, firm in consistency, attached to the skin,

not fixed to the deeper structures, with smooth surface, well-defined edges and the skin over it was normal. It was of one year duration.

- Central lymph nodes of the left axilla were enlarged presenting as a mass of 4x5 cm, with irregular surface, ill-defined edges, firm in consistency, not tender, freely mobile and the skin over it was normal. It was of 2 years duration.

- Laboratory investigations showed leukocytosis $16 \times 10^9/L$ with 73% polymorphs, 6% bands, 16% lymphocytes and 5% monocytes. Hemoglobin was 11.2 g/dl, her liver and kidney functions were normal.

- X-ray of the lumbo-sacral region, P.A. and lateral views, showed the presence of a soft tissue shadow over the first and second lumbar spines with no infiltration of these spines.

- Abdominal C.T. showed the presence of a well-defined irregular soft tissue mass seen subcutaneously at the midline of the back opposite the first and second lumbar vertebrae, it measured 10x7 cm and showed heterogenous pattern of enhancement with contrast hypodense areas likely of breaking-down, the mass was infiltrating the overlaying skin. Other abdominal organs were free (Fig. 1).

- Abdominal ultrasonography and colonoscopy were done to exclude the presence of visceral malignancies and other neoplasms.

- Finally this lady was subjected to surgery where wide excision of the first and second neoplasms as well as a good margin from the normal tissues and primary skin closure was done (Fig. 2). Also in the same sitting left axillary evacuation was

performed and the 3 pathological specimens were sent for histopathological study.

The pathological examination revealed that the first specimen was a firm mass 10x7x5 cm covered by a piece of skin 12x7 cm showing rough surface with focal areas of ulceration, cut section revealed a homogeneous creamy tissue with hemorrhagic areas. The second specimen was a piece of skin and subcutaneous tissue 3.5x2.5 cm in size, cut section revealed an irregular firm whitish nodule.

The microscopic findings of the first and second specimens revealed that almost all histopathological lesions were derived from the epidermal appendages and showed pagetoid spread into the epidermis, the tumor was well differentiated and consisted of germinative transitional and sebaceous cells, mild to moderate pleomorphism and necrotic areas were observed. Ultrastructural findings showed lipid droplets in the tumor cells although Sudan III staining failed to show any positive material. All these findings proved the histopathological diagnosis of a well differentiated infiltrating sebaceous carcinoma (Fig. 3). Pathological examination of the third specimen revealed a lobulated firm mass 7x6x3 cm, cut section was homogeneous yellow with central break-down. Microscopic examination of the axillary lymph nodes revealed a picture of metastatic moderately differentiated sebaceous carcinoma showing wide areas of necrosis and foci of squamous differentiation.

Discussion

Sebaceous gland carcinoma is an uncommon malignancy, usually arising from the meibomian glands of the eye lid, however, extraocular lesions within the head and neck have been rarely reported [4]. The

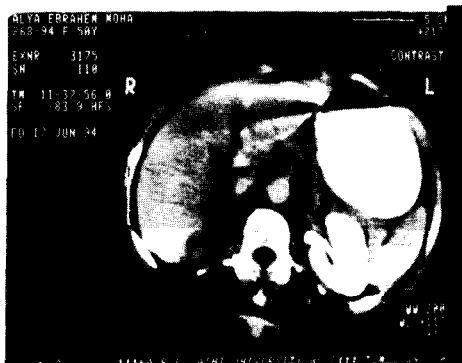


Fig. 1 (A)



Fig. 1 (B)

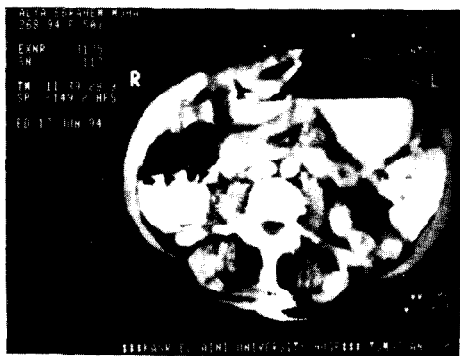


Fig. 1 (C)

Fig. (1): C.T. scan showing the soft tissue mass opposite first and second lumbar vertebrae.

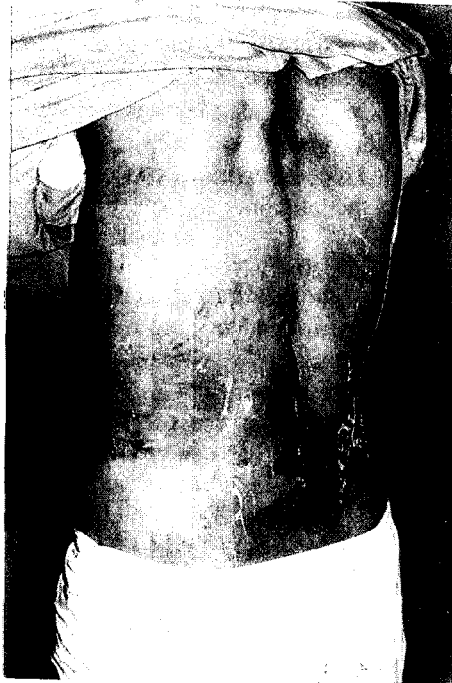


Fig. (2): Scars in the back following wide excision of the two sebaceous carcinomas.

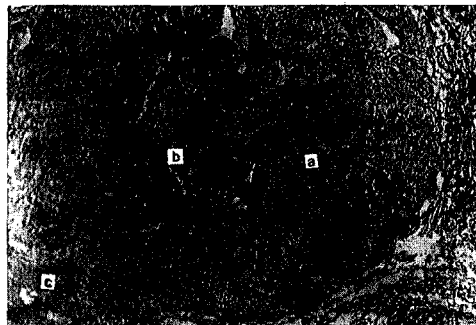


Fig. (3): The microscopic findings of the case: (a) trabeculae of tumor cells showing slight pleomorphism and cytoplasmic clarity, (b) foci of squamous differentiation, (c) necrotic area (H & E x 100).

site of occurrence of sebaceous carcinoma in our case was the back of the patient which is considered as one of the rarest sites of presentation. Kasadan et al. [2] reported a case of sebaceous carcinoma in the finger, while Oka and Katsumata [5] published a case report of sebaceous carcinoma in the left arm.

A careful physical examination and appropriate radiologic and scintigraphic studies were performed in our case since we knew that extraocular sebaceous carcinoma behaves aggressively with lymph node and bone metastases as documented by Verlooy et al. [6] and Jensen et al. [7]. In the series of Tan et al. [8] there were 8 patients out of 25 (32%) with lymph node metastases and 3 patients (12%) died from distant metastatic spread.

Our case was differentiated clinically and histopathologically from other skin cancers, clinically the diagnosis was very difficult since the presentation, clinical behaviour, lymph node involvement and distant spread were similar in most of skin cancers. Histopathologically the diagnosis was accurate depending upon the characteristic microscopical picture of sebaceous carcinoma (Fig. 3).

Anasi et al. [9] concluded that sebaceous carcinoma can be differentiated from other skin cancers like eccrine procarcinoma, malignant clear cell hidradenoma, extramammary Paget's disease, malignant trichoeplithelioma, squamous cell carcinoma and basal cell carcinoma by histochemical and immunohistochemical technique using formaline fixed and paraffin embedded tissue specimens.

C.T. scans, abdominal ultrasonography, colonoscopy and repeated clinical examinations were performed in our case to

exclude the presence of visceral neoplasms, so our case is not categorized into the entity of Muir-Torre Syndrome in which there is association of sebaceous carcinomas and visceral neoplasms. Vissuzaine et al. [10] reported a 67 years old woman with Torre's syndrome, while Wyman et al. [11] published a case report of Torre's syndrome, in a 60 years old man, pointing out the familial predisposition of that syndrome.

Our case was treated surgically by complete excision of all the malignant tissues included the two sebaceous carcinomas and sufficient margin of normal tissues, this was followed by left axillary evacuation. In our opinion this is the ideal line of treatment in such a case and no need for radiation therapy since the tumour is completely excised as it was present over the lumbar vertebrae. Baillet et al. [4] stressed the wide surgical excision with removal of the involved lymph nodes, while DelCimmuto et al. [12] reported that the site of the lesion may constitute an indication for radiation therapy in that it may provide better cosmetic results while radiotherapy has no role in cancer arising in a previously irradiated region and in tumours invading the underlying cartilage or bone.

References

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