Sebaceoma (sebaceous epithelioma) and basal cell carcinoma with sebaceous differentiation - distinct entities or same lesion?

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Sri Lanka Journal of Dermatology, 1998, **3**, 34-35

Summary

We report a cutaneous tumour, which showed histological features of a sebaceoma and a basal cell carcinoma with sebaceous differentiation side by side. The confusing terminology of cutaneous sebaceous tumours will be discussed.

Introduction

Troy and Ackerman first proposed the term sebaceoma in 1984[1], to describe a benign neoplasm of adnexal epithelium with differentiation toward sebaceous cells. They recommended that this term should supersede what had previously been called a sebaceous epithelioma[2]. Others were unable to reproducibly separate sebaceous epithelioma from basal cell carcinoma (BCC) with sebaceous differentiation, and considered both as being the same lesion[3]. Textbooks continue to include the term sebaceoma (sebaceous epithelioma) as a separate entity[4,5]. We report a cutaneous tumour, which showed components with histological features of both sebaceoma and BCC with sebaceous differentiation side by side. We therefore consider both these to be one entity and recommend that they be reported as BCC with sebaceous differentiation.

Case report

A 75-year-old female presented with an ulcerated lesion on her left check of 8 months duration. A clinical diagnosis of a BCC was made and an excision biopsy was performed. A skin lined piece of tissue with an ulcerated surface and a whitish lesion in the underlying dermis was received. It measured 2x1x1 cm.

Microscopic examination revealed a well-circumscribed lesion consisting of cellular masses, some of which were connected to the overlying epidermis. Approximately 2/3 of the tumour consisted of solid, irregular cell masses composed of basaloid cells with indistinct cell borders and oval nuclei (Figure 1). Peripheral pallisading of nuclei was seen focally. Scattered mature sebaceous cells (singly and in clusters) and microcysts containing eosinophilic material were present. A few mitoses were seen. The histological features of this component were compatible with a diagnosis of BCC with sebaceous differentiation.

The contiguous 1/3rd of the tumour showed histological features compatible with a diagnosis of sebaceoma (Figure 2). It was composed of more regular clumps of basaloid cells with larger and more numerous aggregates of sebaceous cells. These had abundant bubbly cytoplasm and indented nuclei. Larger cysts with eosinophilic material were seen.

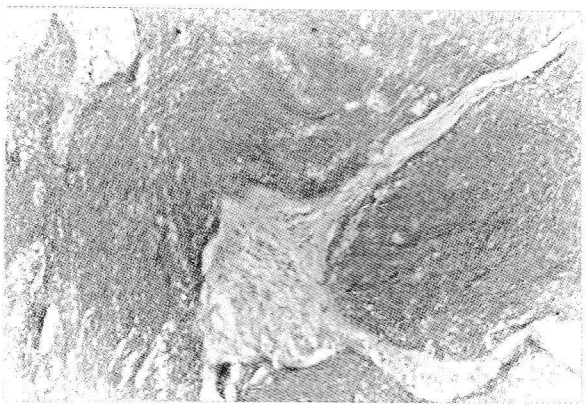

Figure 1. Basal cell carcinoma like component of tumour: solid, irregular cell masses composed of basaloid cells (H & E x100).

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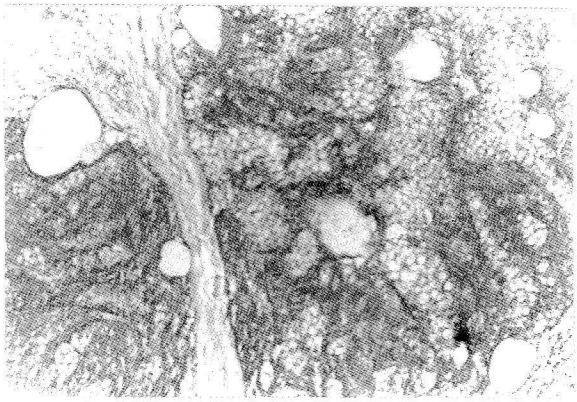

Figure 2. Sebaceoma like component of tumour: clumps of basaloid cells with larger and more numerous aggregates of sebaceous cells (H & E x100).

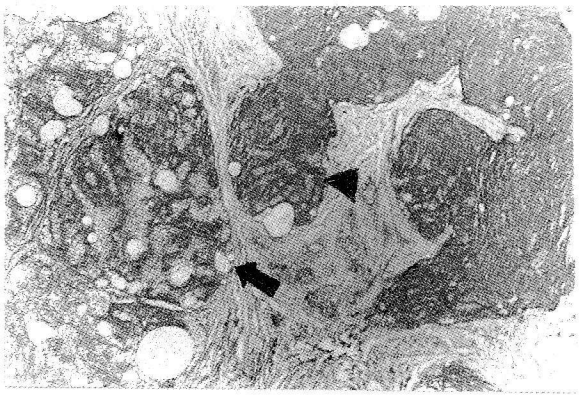

Figure 3. Basal cells carcinoma (arrowhead) and sebaceoma (arrow) occuring side by side (H & E x40).

Discussion

The classical features of a sebaceoma are multiple nests of basaloid cells with a random admixture of sebaceous cells. The lesion is centered on the upper and mid dermis, and some nests are continuous with the basal layer of the epidermis. Basal cells outnumber mature sebaceous cells[1]. Even though over half the cells are basaloid, there are significant aggregates of sebaceous cells and transitional cells[6]. A sebaceoma differs from a sebaceous adenoma in that the cells of the latter are arranged in a more organoid fashion, with basaloid cells at the periphery and sebaceous cells in the center[2]. A BCC with sebaceous differentiation is essentially a BCC in which there are interspersed sebaceous cells and cells transitional from basaloid cells to sebaceous cells[4]. However, clear-cut separation of the two entities is at times impossible because transitions exist[1]. Therefore, some authors do not accept sebaceomas as distinct entities[3].

Our case showed a well-defined sebaceoma (Figure 2, arrow) which was contiguous with an area which showed features of a BCC with sebaceous differentiation (Figure 3, arrowhead). This supports the view that sebaceoma and BCC with sebaceous differentiation are not distinct entities. Sebaceoma may represent a more differentiated component in a BCC with sebaceous differentiation. It is also possible that a sebaceoma may differentiate into a BCC with sebaceous cells. In view of these findings, we feel that sebaceomas should be reported as BCC with sebaceous differentiation in order to avoid confusion among histopathologists and dermatologists. Reporting them as a variant of BCC would also ensure that care is taken to assess whether the surgical margins are involved by tumour, thereby reducing the risk of local recurrence.

References

1. Troy JL, Ackerman AB. Sebaceoma. A distinctive benign neoplasm of adnexal epithelium differentiating toward sebaceous cells. *American Journal of Dematopathology* 1984; **6**: 7-13.

2. Pinkus H, Mehregan AH. A Guide to Dermatohistopathology. New York, Appleton-Century-Crofts. Educational Div. Meredith Corporation. 1969.

3. Rulon DB, Helwig EB. Cutaneous Sebaceous Neo plasms. *Cancer* 1974; **33**: 82-102.

4. Lever WF, Schaumburg-Lever G. Tumours of the Epidermal Appendages. In: Histopathology of the Skin. JB Lippincott Company, Philadelphia 1990; 597-598.

5. Weedon D. Tumours of cutaneous appendages. In: Weedon D; ed. Systemic Patholgy 3rd Edition. The Skin. Churchil Livingstone 1992; 830-833.

6. Hori M, Egami K, Maejima K, et al. Electron microscopic study of sebaceous epithelioma. *Journal of Dermatology* 1978; **5**: 139-147.