CASE REPORT

Extraocular sebaceous carcinoma mimicking benign sebaceous cyst

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SUMMARY

Extraocular sebaceous carcinoma (SC) is an exceptionally rare neoplasm and has been confused in the past with basal cell carcinoma showing sebaceous differentiation. However, in contrast to the latter tumour, SC can be an aggressive cancer. We describe the case of a 55-year-old man with a 3-year history of a 5×2 cm lesion on the posterior thoracic wall. It had increased in size during this period but was otherwise asymptomatic. There was no significant past medical history or lymphadenopathy. Nor was there a family history of malignancy. The lesion was totally excised. The histopathological report revealed SC. As this neoplasm may be associated with Muir-Torre syndrome, the patient was screened for underlying internal neoplasia. All haematological, biochemical and tumour markers, imaging and endoscopic examinations were normal. Since SC may appear before the development of internal malignancy, our patient was scheduled for follow-up visits every 3 months.

BACKGROUND

Sebaceous carcinoma (SC) is a rare and aggressive cutaneous neoplasm arising from holocrine adnexal components of the skin.^{1 2} It may arise in ocular or extraocular sites.² Approximately 25% of all reported cases are extraocular.³ The clinical and pathological recognition of SC is often delayed because it can mimic benign entities.⁴ The presence of SC in 30% of patients with Muir-Torre syndrome (MTS) has been reported.⁵

CASE PRESENTATION

A 55-year-old Caucasian man presented with a 5×2 cm mass on the lower central posterior thoracic wall. The patient and his wife declared a 3-year history of a progressively enlarging asymptomatic skin lesion. There was no history of other lesions on the body, radiation exposure, systemic symptoms or other family members being affected with the same problem. Haematological and biochemical examinations were normal. There was no lymphadenopathy. The lesion was totally excised. The histopathological diagnosis was extraocular SC.

As SC is associated with MTS, the patient underwent urine cytology, colonoscopy and a CT of the abdomen, chest and pelvis to exclude visceral malignancy. All examinations were negative, thus excluding MTS at this stage. Since SC may appear before the development of internal malignancy in patients with MTS, the patient was evaluated by urine cytology, rectal examination, tumour markers and colonoscopy every 3 months in follow-up visits.

INVESTIGATIONS

As SC may be associated with MTS,⁵ screening for underlying neoplasia was performed. Haematological, biochemical, carcinoembryonic antigen, α -fetoprotein, prostate specific antigen, urine cytology, endoscopy and CT of the abdomen, chest and pelvis were normal. The histopathological report revealed SC (figure 1).

DIFFERENTIAL DIAGNOSIS

SC has to be distinguished from basal cell carcinoma with foci of sebaceous differentiation, sebaceous adenoma and squamous cell carcinoma with sebaceous differentiation.^{1 6}

TREATMENT

Wide local excision with sufficient margins remains the mainstay of treatment for SC.¹

OUTCOME AND FOLLOW-UP

No internal malignancy or recurrence of the lesion was seen during 1 year of careful follow-up. The patient was scheduled for follow-up visits every 3 months.

DISCUSSION

SC is an uncommon malignant adnexal tumour with sebaceous gland differentiation that is characterised by aggressive behaviour ranging from local invasion and recurrence to metastasis to area lymph nodes and distant organs.^{1 2 7–10}

Extraocular SC is usually located on the head and neck,³ reflecting a higher density of sebaceous glands at these locations.³ Other uncommon locations include the external genitalia,^{3 9} trunk and extremities.¹⁰

SC is most often described as a slowly enlarging, firm dermal/subcutaneous nodule with bleeding reported in one third of cases.²

Both ocular and extraocular SC may be associated with MTS.^{11 12} Clinically this syndrome is characterised by an increased incidence of sebaceous neoplasms including adenoma, epithelioma, carcinoma and keratoacanthoma and low grade visceral neoplasms of the gastrointestinal and genitourinary tracts.^{11 12}

The incidence of MTS in patients with a histopathological diagnosis of sebaceous adenoma, basal cell carcinoma with sebaceous differentiation or SC has been reported: 42% of such patients had at least one associated visceral malignancy consistent with the diagnostic criteria for MTS.¹³

In a study of 147 patients with MTS and internal malignancy, colorectal carcinoma was the most

To cite: Gavriilidis P, Barbanis S, Theodorou V, et al. *BMJ Case Reports* Published online: [please include Day Month Year] doi:10.1136/bcr-2012-008176

Figure 1 Sebaceous carcinoma indicated by lobular proliferation of atypical, mitotically active cells in the dermis and prominent sebaceous differentiation in subcutaneous tissue typified by multivesicular and vacuolated clear cytoplasm: (A) haematoxylin and eosin (H&E) $\times 100$, (B) H&E $\times 200$, (C) H&E $\times 400$.

common visceral malignancy associated with MTS.⁵ More than one primary tumour may be present and 58% of colonic carcinomas occur proximal to the splenic flexure in contrast to the general population where colonic carcinoma occurs distal to the splenic flexure.^{5–12} Visceral malignancies associated with MTS are often low grade and prolonged survival (over 10 years) has been reported even in the presence of metastases.^{5–12}

Historically, wide local excision with 5–6 mm margins has been the treatment of choice. However, recent studies suggest that Mohs micrographic surgery provides maximal tissue conservation and lower recurrence rates.^{14–15}

Learning points

- ▶ Sebaceous carcinomas are rare but once diagnosed, due to their association with Muir-Torre syndrome (MTS), lifelong surveillance for gastrointestinal or genitourinary malignancy is required.
- ▶ Even though the penetrance of MTS is variable, its autosomal dominant inheritance suggests that relatives should be examined for sebaceous gland tumours and internal malignancy.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Rulon DB, Helwig EB. Cutaneous sebaceous neoplasms. *Cancer* 1974;33:82–102.
- 2 Nelson BR, Hamlet KR, Gillard M, *et al.* Sebaceous carcinoma. *J Am Acad Dermatol* 1995;33:1–15.
- 3 Wick MR, Goellner JR, Wolfe JT III, *et al.* Adnexal carcinomas of the skin. II. Extraocular sebaceous carcinomas. *Cancer* 1985;56:1163–72.
- 4 Wolfe JT III, Yeatts RP, Wick MR, *et al.* Sebaceous carcinoma of the eyelid. Errors in clinical and pathologic diagnosis. *Am J Surg Pathol* 1984;8:597–606.
- 5 Cohen PR, Kohn SR, Kuzrock R. Association of sebaceous gland tumors and internal malignancy: the Muir-Torre syndrome. *Am J Med* 1991;90:606–13.
- 6 Ansai S, Hashimoto H, Aoki T, *et al.* A histochemical and immunohistochemical study of extra-ocular sebaceous carcinoma. *Histopathology* 1993;22:127–33.
- 7 King DT, Hirose FM, Gurevitch AW. Sebaceous carcinoma of the skin with visceral metastases. *Arch Dermatol* 1979;115:862–3.
- 8 Mandreker S, Pinto RW, Usgaonkar U. Sebaceous carcinoma of the eyelid with metastasis to the parotid region: diagnosis by fine needle aspiration cytology. *Acta Cytol* 1997;41:1636–7.
- 9 Oppenheim AR. Sebaceous carcinoma of the penis. *Arch Dermatol* 1981;117:306–7.
- 10 Moreno C, Jacyk WK, Judd MJ, *et al.* Highly aggressive extraocular sebaceous carcinoma. *Am J Dermatopathol* 2001;23:450–5.
- 11 Schwartz RA, Goldberg DJ, Mahmood F, *et al.* The Muir-Torre syndrome: a disease of sebaceous and colonic neoplasms. *Dermatologica* 1989;178:23–8.
- 12 Schwartz RA, Torre DP. The Muir-Torre syndrome: a 25-year retrospect. *J Am Acad Dermatol* 1995;33:90–104.
- 13 Finan MC, Connolly SM. Sebaceous gland tumors and systemic disease: a clinicopathological analysis. *Medicine* 1984;62:232–42.
- 14 Spencer JM, Nossa R, Tse DT, *et al.* Sebaceous carcinoma of the eyelid treated with Mohs micrographic surgery. *J Am Acad Dermatol* 2001;44:1004–9.
- 15 Alessi E, Brambilla L, Loporini G, *et al.* Multiple sebaceous tumors and carcinomas of the colon: Torre syndrome. *Cancer* 1985;55:2566.

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