

Case Report

Locally aggressive recurrent sebaceous carcinoma of the scalp with post auricular ‘kissing ulcer’: an infrequent skin appendageal neoplasm at unusual location

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ABSTRACT

Sebaceous carcinoma is an infrequent malignancy that arises from skin appendageal system. It is usually common in elderly age with slightly female preponderance. Asian population have higher incidence of this malignancy. Most commonly it occurs in orbital region (75%) and rarely this tumour presents in extraocular regions like scalp, face, genitalia and extremities. This tumour can be locally aggressive, has more chances of recurrence and can spread to lymph nodes, skull bones, dura, brain and viscera. Usually there are no etiological factors implicated, but some cases may have association with Muir Torre syndrome. Definite diagnosis can be confirmed on histopathology. Accurate diagnosis and thorough management remain important against this aggressive dermatological malignancy. Here, we are presenting a case of a man in his mid 60s with recurrent sebaceous carcinoma arising from the scalp, with involvement of right post auricular area. He was managed with wide local excision and scalp rotation advancement flap. Patient did not show any evidence of local recurrence after a follow up period of 3 years. Adjuvant radiotherapy may be considered to improve the outcome for recurrent tumours. These patients should be closely followed for assessment of distant metastasis and recurrence.

Keywords: Recurrence, Carcinoma sebaceous, Adjuvant radiotherapy, Scalp, Kissing ulcer

INTRODUCTION

Carcinoma sebaceous is a rare malignant skin neoplasm which has an aggressive nature. It usually presents in elderly females and the incidence can vary from 0.2% to 4.6% among various dermatological malignancies.¹ Most commonly it presents as a periocular (1/3rd of cases) tumour arising from sebaceous gland epithelium. Extraocular variant is less common (25%) and less aggressive in nature. Extra orbital variant mainly presents on head and scalp followed by external genitalia, extremities. So far only approximately 150-160 cases of extra orbital variant of sebaceous carcinoma have been reported.² Locally aggressive sebaceous carcinoma of the scalp is exceedingly uncommon (only 6 cases have been reported) which can invade cranium, brain and dura mater,

viscera and regional lymph nodes and have high mortality and recurrence rate.³ Carcinoma sebaceous mainly originates from in-situ mutations but cases with Muir-Torre syndrome can have microsatellite instability and shows loss of mismatch repair gene expression.⁴ Local recurrence can be seen in about 30-40% of patients and 10%-15% cases can have regional metastasis.⁵ Definitive diagnosis is mainly based on histopathology. Malignant tumours of the scalp can vary in their behaviour and poses a diagnostic challenge. Early diagnosis is a must to control mortality and morbidity related to this malignancy.

CASE REPORT

An average built man in his mid-60s presented to our outpatient department with an ulcero-proliferative growth

on right temporal area with involvement of post auricular region for a time period of 3 months. Excision of a growth at same site was done at a private hospital 6 months back. Histopathological report was suggestive of sebaceous carcinoma. Growth was painless, increasing rapidly in size since last month and involved posterior aspect of right ear subsequently. On physical examination, a pedunculated growth of irregular surface with size of about 4×3 cm, immobile nature and firm consistency was present over the right temporal area. Margins were rolled up and the base bled on touch. The tumour was continuously touching the posterior surface of right ear resulting in an 'kissing ulcer' (Figure 1). No significant regional lymphadenopathy was noted and there was no history of other swellings, discharge, constitutional symptoms. His systemic examination was within normal limit.



Figure 1 (A and B): Kissing ulcer' present on the post auricular region.

Ulceroproliferative growth noted in right temporal area extending into the occipital area. Scar of previous surgery noted on anterior aspect of tumour.

Investigation

Computed tomography of skull showed a single heterogeneously enhancing soft tissue lesion in the right temporal area with thickening of post auricular skin with no underlying bony involvement. Brain, neck, chest, and abdomen scan showed no evidence of any distant metastasis. Routine blood counts, kidney and liver function tests, alpha fetoprotein and carcinoembryonic antigen were within normal limits. Gastroenterology

opinion for colonoscopy was also taken to rule out visceral malignancies which came out normal. Faecal occult blood test was negative.

Treatment

Patient underwent wide local excision of tumour with 1 cm margins (Figure 2). Resultant scalp defect was reconstructed with rotation advancement scalp flap and split thickness graft was applied over the post auricular region (Figure 3). Tumour did not seem to be invading skull bones. Excised tumour was sent for histopathological assessment and gross inspection showed a single nodular growth measuring 4×3.5×2.5 cm in size. On serially slicing, tumour was grey white to greyish yellow predominantly solid with areas of haemorrhages. Microscopically, the sections showed an infiltrating tumour reaching up to deep dermis. The tumour is arranged in the form of nests and sheets (lobular) with central comedonecrosis. Lobules were of different sizes, irregular and contains mainly squamoid and basaloid cells. The tumour cells showed moderate to marked pleomorphism with nuclei scalloping, vesicular chromatin, moderate amount of clear to foamy cytoplasm and prominent nucleoli (Figure 4). Immunohistochemistry examination revealed tumour cells were positive for EMA (epithelial membrane antigen), AR (androgen receptor) and negative for S-100, HMB 45, CEA. The resected margins and the deep resected plane were free of tumour. Adjuvant radiotherapy (50 Gray in twenty fractions for 4 weeks) was given to the patient as it was a recurrent and locally aggressive tumour.

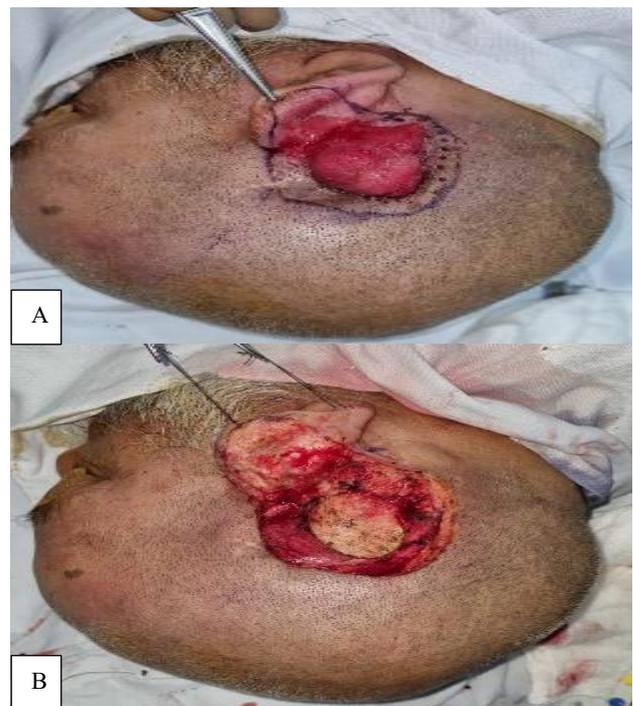


Figure 2 (A and B): Wide local excision with 1 cm.

*Tumour was extending upto periosteum. However, no underlying bone was involved.

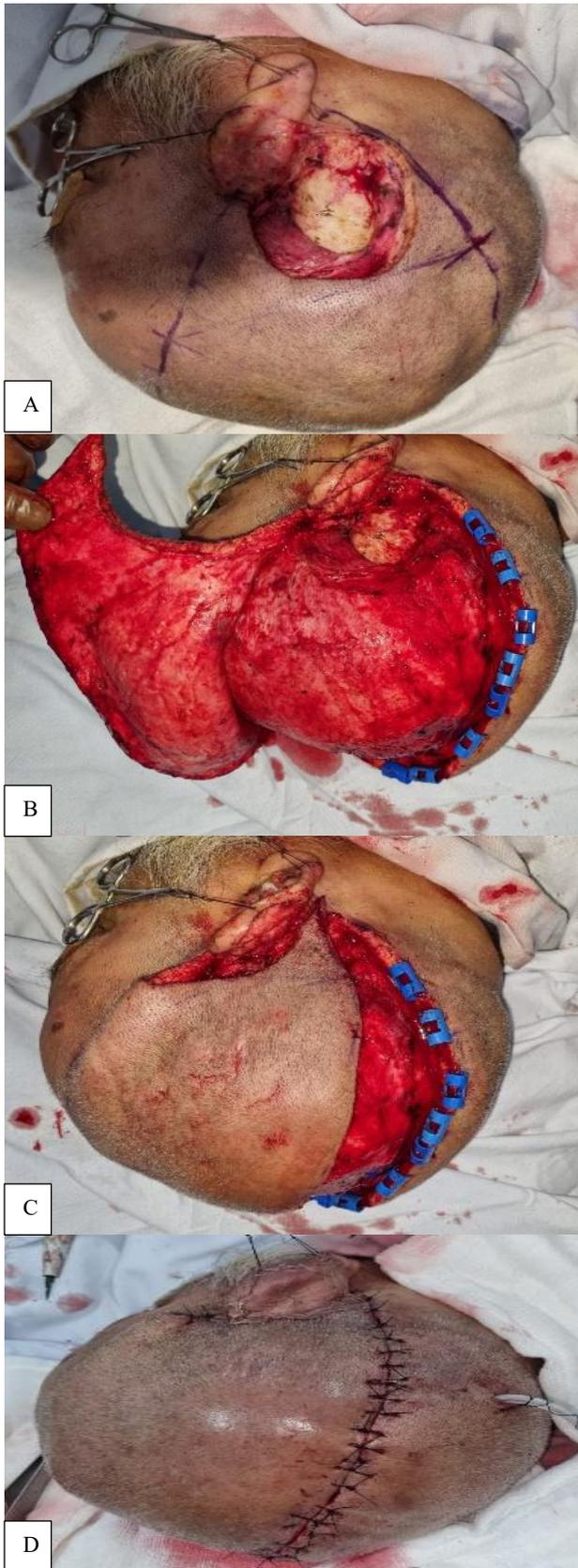


Figure 3 (A-D): Scalp defect was reconstructed with rotation advancement flap.

*Rotation flap marking. Flap elevation and inset. Split thickness grafting was done over the posterior aspect of ear.

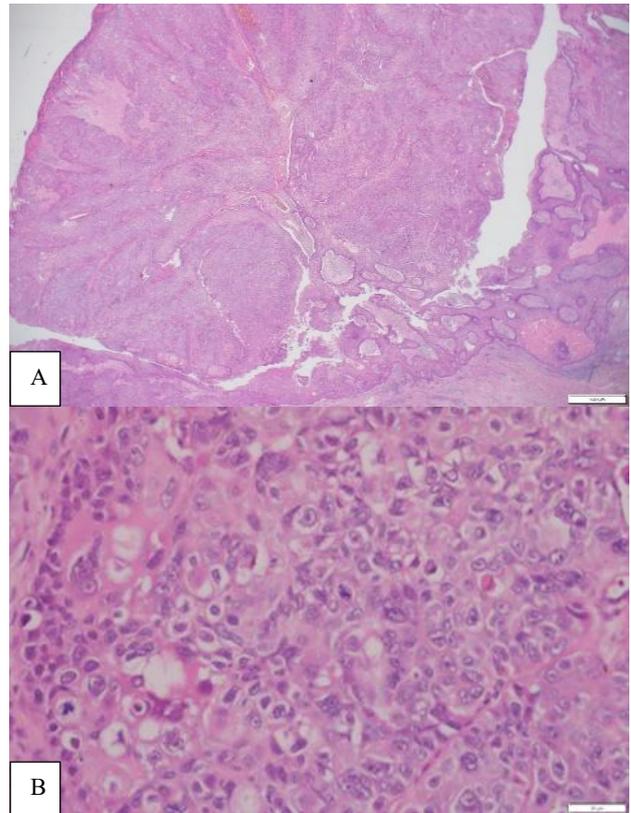


Figure 4 (A and B): Lobular, atypical mitosis, vascular invasion, central necrosis, unencapsulated, collections of sebaceous cells in dermis.

*Lobules containing atypical pleomorphic cells having nuclear hyperchromatism and pleomorphism, cytoplasmic foamy vacuolization and mitotic figures (H and E staining).

Outcome and follow up

Post operative period was uneventful and flap settled well with time. As of now, patient has been followed up for a period of 3 years and is totally disease free (Figure 5). No surgery related complication was noted. He is on regular follow up to monitor recurrence. This case demonstrates the highly locally aggressive nature of this malignancy.



Figure 5: Follow up at 3 years.

*No recurrence was noted and he is on regular follow up and surveillance.

DISCUSSION

Carcinoma sebaceous is a neoplasm of the 6th and 7th decade of life which usually presents in elderly females. Periorbital region is the most common site followed by head and neck region wherein sebaceous glands are found in abundance.⁶ Different clinical behaviour is seen in extra orbital variant as compared to the orbital variant. These malignancies usually present with variable morphological features and can mimic other different types of malignancies which may lead delayed diagnosis.⁷ These tumours can have an aggressive nature and are known for their locally recurrence as well as metastasis to visceral organs.⁸

Recurrence rates and distant metastases are seen less commonly in the extra-ocular carcinoma sebaceous as compared to ocular variant. This malignancy has unknown pathogenesis. However, it can be associated with advanced age, previous irradiation, Asian race, Muir-Torre syndrome and immunosuppressed patients.⁹ Muir Torre syndrome is an autosomal dominant condition with germ line mutations in the MLH1 and MSH2 genes on chromosomes 2p and 3p respectively.¹⁰ This syndrome is characterized by sebaceous neoplasms with one or more low grade malignancies of visceral system associated with or without keratoacanthomas. This syndrome must be ruled out in each case of sebaceous malignancies. Present case was screened for this syndrome with USG chest and abdomen, urine examination and colonoscopy. However, all of them were negative.¹¹

This tumour usually presents as a painless, firm, pinkish yellow, gradually enlarging, localised popular or nodular subcutaneous growth that has irregular surface. Sebaceous differentiation is characteristic histological marker of this malignancy. The tumour cells show nuclear pleomorphism, lobular architecture, cytoplasmic foamy vacuolization, hyperchromatic nuclei and mitotic activity. It can be well, moderately or poorly differentiated. Positive immunohistochemical markers of neoplasm includes epithelial membrane antigen (EMA), cytokeratin, AR, anti-BCA antibody-225, Cam5.2 and Ber-EP4.¹² Adverse prognostic factors include multicentric tumour, infiltrative growth pattern, poor differentiation, vascular or lymphatic involvement, size >1 cm, duration >6 months, pagetoid change and previous irradiation.^{13,14} Differential diagnosis of this malignancy includes clear cell melanoma and hidradenocarcinoma, clear cell variant of squamous cell carcinoma, metastatic prostatic and renal cell carcinoma.

The prime management of carcinoma sebaceous is excision with wide margins of at least 1 cm. Adjuvant radiotherapy can improve the clinical outcome in case recurrent sebaceous carcinoma. However, its role is not defined in the extra ocular variant due to its infrequent occurrence and can be considered in surgically unfit patients, those with recurrence disease and metastasis.¹⁵ Our patient developed tumour recurrence and subsequently tumour involved post auricular area which

showed the locally advanced nature of this neoplasm. So, adjuvant radiotherapy was considered after surgery. Patient was successfully managed and currently followed up to 3 years without any recurrence and metastasis. These patients require life-long surveillance for malignancy because sebaceous carcinoma can reoccur and may precede visceral malignancies by many years.

CONCLUSION

Extra ocular carcinoma sebaceous is an infrequent and aggressive skin neoplasm which poses a diagnostic challenge for many plastic surgeons. Diagnosis can be confirmed on histopathological examination and it requires radical excision with at least 1 cm wide margins followed by supplementary therapy depending on the prognostic factors. Accurate and timely diagnosis can aid to commence earlier management and adjuvant radiotherapy can improve overall clinical outcomes in case of recurrent tumours. Muir-Torre syndrome should be ruled out in each and every case and these cases should be reviewed closely for distant metastasis and recurrence.

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REFERENCES

1. Knackstedt T, Samie FH. Sebaceous Carcinoma: A Review of the Scientific Literature. *Curr Treat Options Oncol.* 2017;18(8): 47.
2. Akhtar S, Oza KK, Roullet RG. Multiple sebaceous adenomas and extraocular sebaceous carcinoma in a patient with multiple sclerosis: case report and review of literature. *J Cutan Med Surg.* 2001;5(6): 490-5.
3. Li G, Shen J, Huang H, Chen R, Zhou G. Aggressive sebaceous carcinoma of the scalp: a case report and literature review. *Transl Cancer Res.* 2021;10(9):4237-42.
4. Kraft S, Granter SR. Molecular pathology of skin neoplasms of the head and neck. *Arch Pathol Lab Med.* 2014;138(6):759-87.
5. Subramanian C, Krishnasamy S, Dhamodaran AC, Appavu M. A Rare Case of Sebaceous Carcinoma of Scalp with Parotid and Neck Secondaries. *J Evidence Based Med Healthcare.* 2015;2(52):8699-702.
6. Bailet JW, Zimmerman MC, Arnstein DP, Wollman JS, Mickel RA. Sebaceous carcinoma of the head and neck Case report and literature review. *Arch Otolaryngol Head Neck Surg.* 1992;118:1245-9.
7. Rao NA, Hidayat AA, McLean IW. Sebaceous carcinoma of the ocular adnexa: A clinicopathologic study of 104 cases, with five-year follow-up data. *Hum Pathol.* 1982;13(2):113-22.
8. Verlooy H, Mortelmans L, Schiepers C. A rare case of sebaceous carcinoma with very malignant characteristics. *Clin Nucl Med.* 1993;18(5):425-7.
9. Grigoryan KV, Leithauser L, Gloster HM. Aggressive extraocular sebaceous carcinoma recurring after mohs

- micrographic surgery. *Case Rep Oncol Med.* 2015;2015:534176.
10. Subramanian C, Krishnasamy S, Dhamodaran AC, Appavu M. A Rare Case of Sebaceous Carcinoma of Scalp with Parotid and Neck Secondaries. *J Evid-based Med Healthc.* 2015;2:8699-702.
 11. Cohen PR, Kohn SR, Kurzrock R. Association of sebaceous gland tumors and internal malignancy: the Muir-Torre syndrome. *Am J Med.* 1991;90:606-13.
 12. Natarajan K, Rai R, Pillai SB. Extra ocular sebaceous carcinoma: a rare case report. *Indian Dermatol J.* 2011;2(2):91.
 13. Bhavarajua VM, Shamim SE, Naik VR, Shaari S. Sebaceous cell carcinoma of scalp-A rare presentation. *Malay J Med Sci.* 2007;14(1):67.
 14. Hasebe T, Mukai K, Yamaguchi N. Prognostic value of immunohistochemical staining for proliferating cell nuclear antigen, p53 and c-erbB-2 in sebaceous gland carcinoma and sweat gland carcinoma: comparison with histopathological parameter. *Mod Pathol.* 1994;7(1):37-43.
 15. Knackstedt T, Samie FH. Sebaceous Carcinoma: A Review of the Scientific Literature. *Curr Treat Options Oncol.* 2017;18:47.

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