SAS Journal of Surgery
Abbreviated Key Title: SAS J Surg
ISSN 2454-5104
Journal homepage: https://www.saspublishers.com

OPEN ACCESS

Surgery

Sarcomatoid Carcinoma of the Scalp - Case Report

S. Sylla[1*], OE Atiqui[1], C.E. Fifatin[1], Y lamalla[1], O Oudrhiri[1], S Boukind[1], MD Amrani[1], Y. Benchamkha[1]

[1]Department of Plastic, Reconstructive and Aesthetic Surgery

DOI: https://doi.org/10.36347/sasjs.2025.v11i05.028 | **Received:** 11.04.2025 | **Accepted:** 16.05.2025 | **Published:** 23.05.2025

***Corresponding author:** S. Sylla
Department of Plastic, Reconstructive and Aesthetic Surgery

Abstract **Case Report**

Carcinosarcoma is a rare malignant tumour of the head and neck region, combining epithelial and mesenchymal components. The lack of reported cases prevents the establishment of standardised norms for the treatment of this type of cancer. We report the case of a 75-year-old man, who presented with a left parietal scalp wound, a biopsy of which returned in favour of follicular basal cell cancer. The patient underwent surgery to remove the tumour, followed by coverage of the area with a parietal flap and a graft from the donor area a week later with histopathological study of the excision specimen in favour of basal cell sarcomatoid carcinoma with healthy margins. The rarity of this tumour in particular in this location poses a diagnostic problem and timely management. However, wide surgical excision remains the best treatment. Through this case we have highlighted the particularities of the rapid evolution and especially prognosis of this tumour.

Keywords: carcinosarcoma, scalp, tumor.

INTRODUCTION

Carcinosarcoma is a biphasic malignant tumour comprising both an epithelial and mesenchymal carcinomatous component. It is a rare tumour, particularly in the head and neck region.

Many synonyms have been used to designate these tumours (metaplastic carcinoma, pseudosarcoma, spindle cell carcinoma, etc.). Currently, the histogenetic concept has changed and it is thought that these are genuine sarcomatoid carcinomas [1].

Cutaneous carcinosarcoma is exceptional; the first case was reported by Dawson in 1972 [2].

Its diagnosis of certainty is histological and immunohistochemical.

Due to the small number of cases reported in the literature, there are no standardised norms for the treatment of this type of cancer. C is a tumour with a dreadful prognosis, with recurrent features both locally and at a distance with a relatively high mortality rate.

PATIENT AND OBSERVATION

Patient aged 75, with no particular pathological history.

He was the victim of a minor trauma caused by a tree break, resulting in a wound of the left parietal scalp, with the application of traditional products. The evolution was marked by a swelling with ulceration and pus and serosities, with a progressive increase in size 10 months after his admission (**Figure 1**),

Figure 1: Ulcerating lesion of the left parietal scalp

A biopsy suggested follicular basal cell carcinoma.

A 1st cerebral CT scan was carried out: ulcerative lesion process of the left parietal scalp with no bone lysis or endocranial extension; a corticalised bone defect of the right fronto-parietal external table associated with a depression of the soft parts of the opposite scalp with no cutaneous opening (old trauma?) was noted (**Figure 2**)

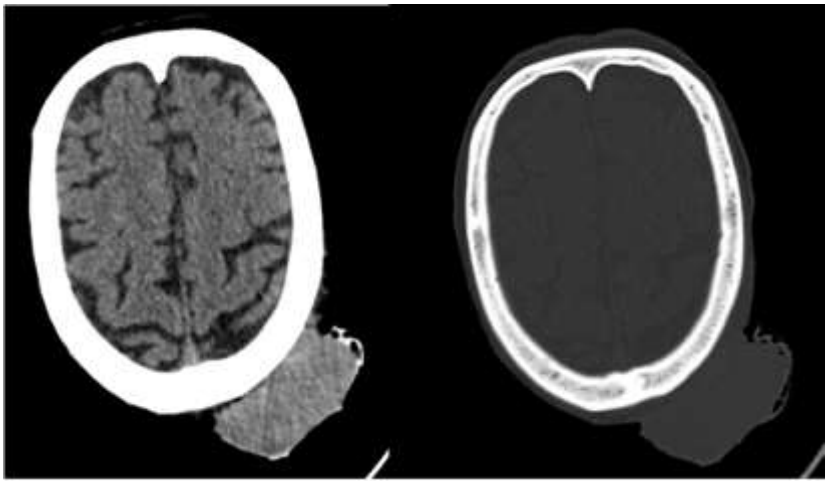

Figure 2: Axial section CT scan showing an ulcerating, budding lesion of the left parietal scalp without bone lysis or endocranial extension

The patient was operated on in our training centre for tumour removal and then covered with a parietal flap with grafting of the donor area one week after removal, with an anatomical pathology result suggestive of basal cell sarcomatoid carcinoma with healthy margins (**Figure 3**).

Figure 3: Coverage with a parietal flap and grafting of the donor area one week after excision

The patient was readmitted to hospital for tumour recurrence 83 days post-coverage, with subcutaneous nodules in the left parietal scalp, opposite the scar, tense, renitent and fixed in relation to the deep plane. The lymph nodes were free on palpation and there were no adenopathies on cervical ultrasound. (**figure 4**).

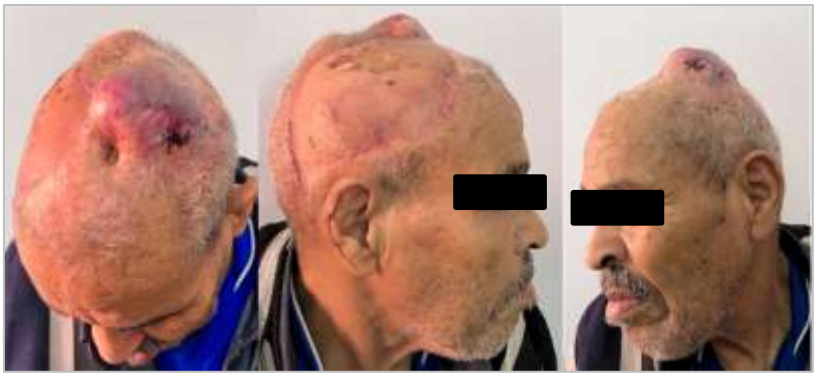

Figure 4: Tumour recurrence at 83 days

A 2nd cerebral CT scan was performed, suggesting a tumour process of the left parietal scalp with extensive necrosis and local infiltration, with endocranial extension and probably tumour thrombosis of the superior longitudinal sinus. This suggests a recurrence. (**figure 5**)

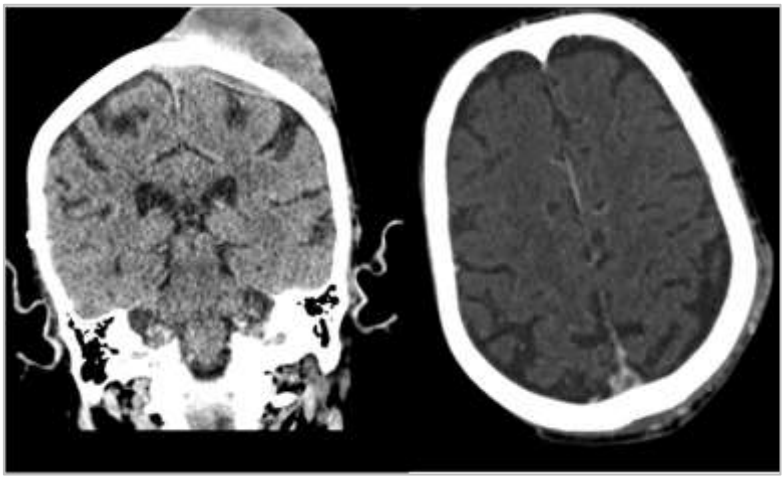

Figure 5: Axial CT section showing an extensively necrotic tumour process of the left parietal scalp with endocranial extension responsible for thrombosis of the longitudinal sinus. supérieur

In addition, an MRI angiography revealed a tumour process of the left parietal scalp that was largely necrotic and locally infiltrating, with endocranial extension responsible for tumour invasion and thrombosis of the superior longitudinal sinus recurrence. (**figure 6**)

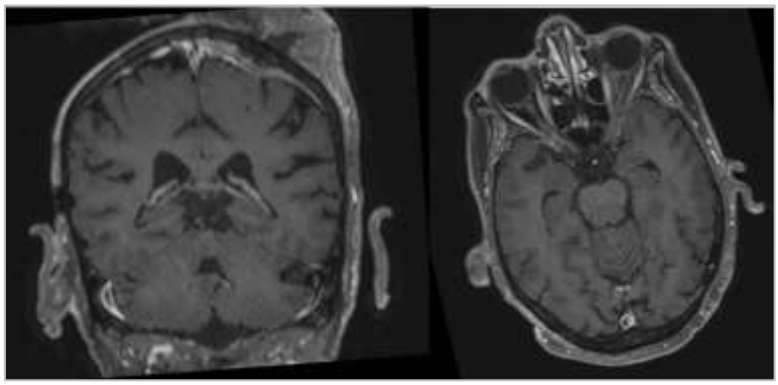

Figure 6: MRI angiogram showing widely necrotic and locally infiltrating tumour process of the left parietal scalp with endocranial extension responsible for tumour invasion and thrombosis of the longitudinal sinus

And CAT scan: pulmonary nodule and micronodule, to be monitored. Right renal cyst classified as Bosniak type l (figure 7).

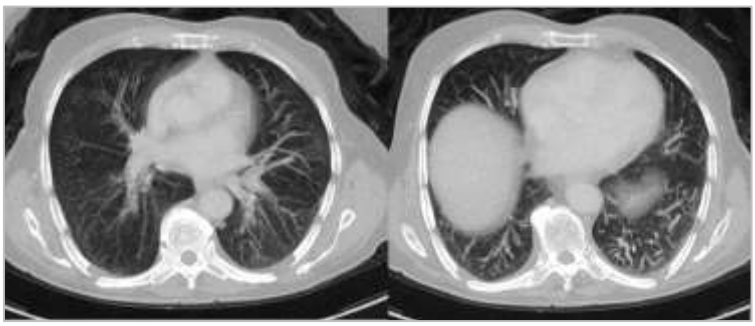

Figure 7: CT scan showing lung nodule and micronodule

This led to a 2nd biopsy, which suggested a malignant sarcomatoid tumour proliferation suggestive of a carcinosarcoma.

In the 2nd stage of surgery, the patient underwent a monobloc tumour removal with a cranial flap plus coverage by a frontal flap and a graft from the donor area at the same time. (**figure 8**).

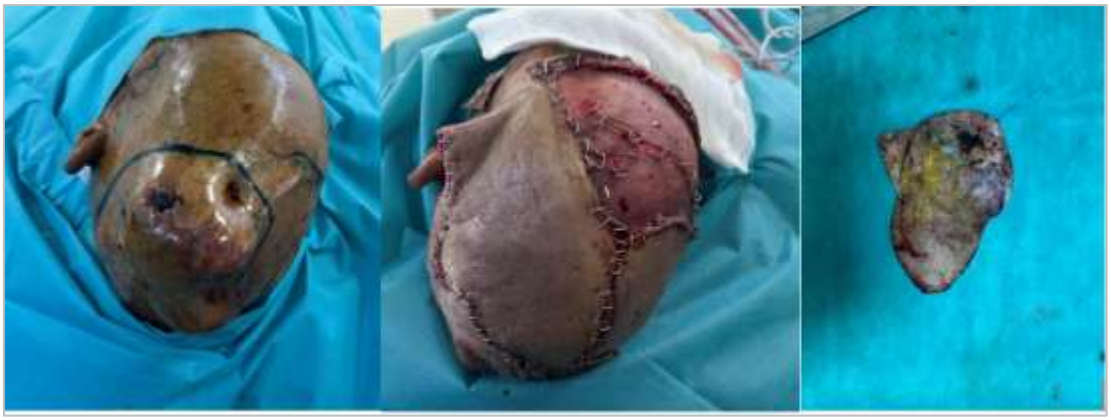

Figure 8: One-piece tumour removal with a cranial flap plus coverage by a forehead flap and a graft from the donor area at the same time

The patient was still being monitored after discharge, with an appointment with the oncologists for radiotherapy. The patient died on day 12 post-surgery.

DISCUSSION

By definition, carcinosarcoma is a malignant tumour proliferation made up of intimately interwoven epithelial and connective elements. Numerous terms based on morphological or histogenetic criteria have been used to designate these tumours. Currently, the term carcinosarcoma or, better still, sarcomatoid carcinoma is used [1].

In the literature, cutaneous localisations are very rare [3, 4]. The age of onset of cutaneous carcinosarcoma varies from 36 to 91 years depending on the rouas series. [1], In our case, the patient was 75 years old.

The location varies: the vulva [5], face, scalp, arms and trunk. Comparable in our context with scalp involvement.

Diagnosis can take from several weeks to 30 years. [4]. In our case it was 10 months.

In this type of tumour, recurrence is frequent and occurs in 22% of cases. 100 cases [6]. Lymph node or visceral metastases may be carcinomatous or sarcomatous, or both. They were observed in 16.7 p. 100 (4) to 22%. 100% of cases [6]. No metastasis in our context.

Treatment consists of as complete a surgical removal as possible. Radiotherapy has been used in some cases [7, 8].

Their prognosis is the same as that of high-grade carcinomas of the corresponding organs, with in particular the same metastatic profile. They are often rapidly progressive tumours. From a histopathological point of view, the existence of a sarcomatous component is in itself a sign of the aggressive nature of this type of tumour. Finally, the metastases are often epithelial, which is another factor in favour of the aggressive nature of the carcinomatous component, which remains the predominant feature in sarcomatoid carcinomas [1].

CONCLUSION

From this observation we can deduce that scalp carcinosarcoma is a tumour with a very poor prognosis and a high potential for recurrence and aggressiveness.

BIBLIOGRAPHIE

1. Rouas L, Amrani M, Regragui A, Gamra L, Bellabas MA. [Carcinosarcoma of the skin]. Ann Dermatol Venereol. avr 2006;133(4):362-5.
2. Dawson EK. Carcino-sarcoma of the skin. J R Coll Surg Edinb. juill 1972;17(4):243-6.
3. Martin De Lassalle E, Augusto D, Djotni H, Delaporte E, Piette F, Wechsler J, et al. [Carcinosarcoma of the scalp]. Ann Pathol. sept 2002;22(4):305-9.
4. Brown TJ, Tschen JA. Primary Carcinosarcoma of the Skin: Report of a Case and Review of the Literature: Dermatol Surg. juin 1999;25(6):498-500.
5. Parham D m., Morton K, Robertson A j., Philip W d. p. The changing phenotypic appearance of a malignant vulval neoplasm containing both carcinomatous and sarcomatous elements. Histopathology. 1991;19(3):263-8.
6. Patel NK, McKee PH, Smith NP, Fletcher CD. Primary metaplastic carcinoma (carcinosarcoma) of the skin. A clinicopathologic study of four cases and review of the literature. Am J Dermatopathol. août 1997;19(4):363-72.
7. Roh MS, Jeong JS, Hong SH. Rosai-Dorfman Disease of the Nose and Salivary Gland: A case report. J Pathol Transl Med. 33(12):1203-6.