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Spindle Cell Carcinoma of Scalp, A Rare Case Report

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ABSTRACT

Carcinosarcomas are cancers of both elements of epithelium and connective tissue. It considered as tumour of visceral organs. These tumours are aggressive in nature , leads to higher mortality and morbidity. Fortunately, they affect rarely to skin and having good prognosis as they can be detected earlier than visceral counterpart. Only few cases reported to literature till date. We report a case of carcinosarcoma affecting scalp skin. Though it can be detected earlier and have good prognosis but like a present case it can be lethal due late presentation due ignorance on the part of patient and relatives. Histopathological examination with imaging is very important in deciding further management. A good reconstruction is often required after wide excision of lesion. As very a smaller number of cases reported till date in literature it is our aim to increase awareness in clinician about this potentially treatable condition and help to detect it as early as possible.

KEY WORDS: CARCINOSARCOMA, SARCOMATOID CARCINOMA, SKIN MALIGNANCY.

INTRODUCTION

Carcinosarcoma or spindle cell carcinoma (SPCC) is a rare cancer of proximal aero and gastrointestinal tract. Commonest part affected is vocal cords and inferior part of pharynx. Skin is rarer site of origin . SPCC is disease of old age affecting in 60-70 years of age. Females are less affected. Smokers, alcohol drinking , and past exposure to radiation considered as culprit . It is a nothing but less differentiated brother of squamous cell carcinoma (SCC) with a more aggressive pathology and poor prognosis. This biphasic cancer having is both epithelial and connective tissue elements. Inspite of number of studies related pathology of this tumour exact pathogenesis is still not clear. Hence many varieties of nomenclature is available for this rare tumour like carcinosarcoma, pseudo sarcoma, sarcomatous carcinoma, collision tumour, and pseudo sarcomatous carcinoma (Murat Oktay et al., 2011).

Carcinosarcoma (CS) is a rare cancer, only 100 cases of CS of the skin have been reported till date2. In this report, we describe a single case of carcinosarcoma presenting as nonhealing scalp ulcer. As very a smaller number of cases reported till date and If scalp is considered site wise then only one case was reported in 2019 in literature hence it is our aim behind reporting this case is to increase awareness in clinician about this potentially treatable condition.

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Case Report: Patient presented to Acharya Vinoba Bhave rural hospital (AVBRH) with complaints of ulceroproliferative growth over scalp for 4 years. Swelling in the right side of the neck for 2 months. The ulceroproliferative growth was spontaneous in onset and gradually progressive in size to attain current size of 5x4 cm.it was associated with pain which was localized to the growth, and pins and needles in character, with no radiation, the pain has no aggravating and reliving factors, it was mild pain. Also, the patient complained of swelling in the right side of neck which was spontaneous in onset and rapidly progressed in size to attain the current size of 9x10 cm.it has no aggravating and relieving factors. Patient underwent excision of the swelling in the past twice which was sent for histopathological examination suggesting high grade spindle cell carcinoma. On examination the patient was vitally stable with lymphadenopathy in the cervical region.

Systemic examination was with in normal limits. Local examination was done in which a single ulcer was noted in the occipital region of the scalp measuring 5x4 cm with slough in it, with irregular edges the surrounding skin was tense and red. there was evidence of minimal discharge from the ulceroproliferative growth. All the findings of inspection were confirmed on palpation a single ulceroproliferative growth present in the occipital region measuring 4.5x5.6 semispherical in shape with irregular edges, with everted edges, fixed to the underlying bone. Tenderness present, there was no evidence of local raised temperature. The tissue was friable and bleeds on touch(see figure 1). Also, there was evidence of swelling in the right side of the neck, which was 9x8 cm, bosselated, skin over the swelling was tense, with no discharge, on pulsatile. His contrast enhanced computerized tomography(CECT) of head which was suggestive of large extracalvarial soft tissue mass in the right side with metastatic scalp deposits and right level 2 lymphadenopathy. Patient also underwent CECT of the neck which was suggestive of there is e/o a well-defined heterogeneously enhancing soft tissue density mass lesion noted in the posterior region of neck on right side in the peri vertebral space the lesion is seen infiltrating the trapezius, and posterior belly of digastric muscles on right side. the lesion is seen crossing the midline and measures 10.7 x 7.6 x 6.0 mm (trans x ap x cc)extending from the level of occipital bone to c3 vertebra.

Overlying cutaneous planes are spared (see figure 2). the planes with parotid gland anteriorly and the fat plane with the carotid space anterio-medially appears spared. the vertebral artery appears separate from the lesion. enlarged heterogenous enhancing lymph node of approximates size 3.5 x 4.6cms seen in the right level 2. no other lymphadenopathy in neck region. CECT thorax was also done which was suggestive of heterogeneously enhancing soft tissue density lesion with lobulated outer margins measuring 93 x 35 x 24 mm noted in medial segment of left lower lobe. Wedge biopsy was done under all aseptic precautions which was suggestive of epithelial malignancy with sarcomatous elements. Tumour board discussion was done in which he was advised 3 cycles of carboplatin and paclitaxel. Patient underwent 3 cycles of the chemotherapy with carboplatin and paclitaxel now the size of tumour has reduced significantly (see figure 3).

Figure 1: ulceroproliferative growth over the parietooccipital region before chemotherapy

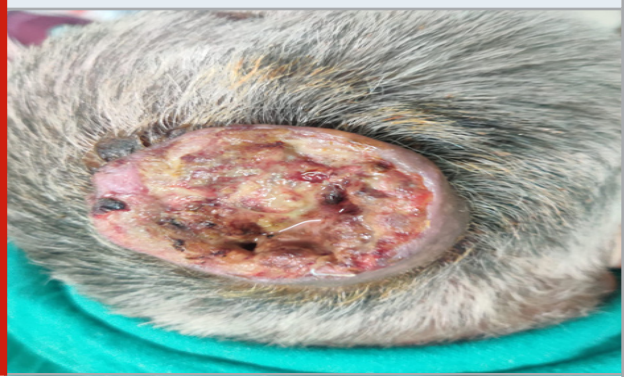


Figure 2: CECT of the head shows evidence of lymph node mass.

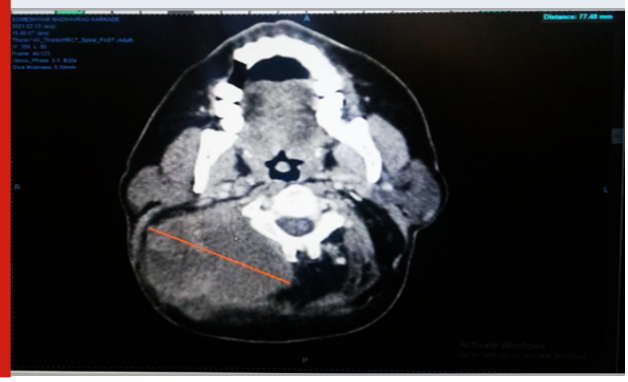
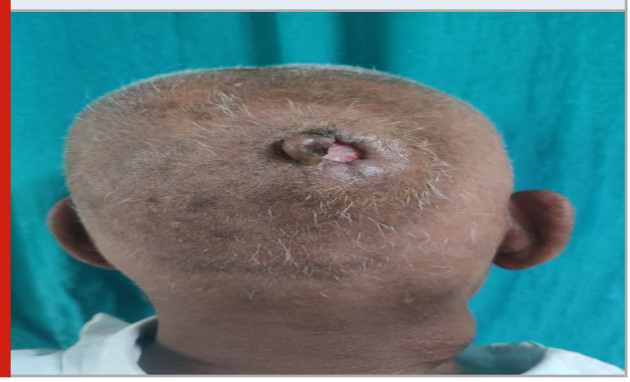


Figure 3: Post chemotherapy regression of the growth



DISCUSSION

SPCC is a rare type of squamous cells carcinoma (SCC) having two elements ,one from epithelium and other from connective tissue. Spindle cell element is arising from connective tissue. Skilled pathologist is needed to arrive at correct diagnosis specially when epithelial elements not clearly visible. Three hypotheses are present

to explain nature of spindle cells. First theory states that these cell and squamous cells derived from separate stem cells but developed in same time not one after another. Second hypothesis is related to development of the spindle cell secondary to stromal growth of cells. lastly, both these cells are arising not from separate stem1.

Murat Oktay et al1 reported middle aged female recurrent SCC of tongue without lymph node metastasis. Biopsy confirms presence pleomorphic spindle cells. As past pathology report was of SCC, the lesion was diagnosed as SPCC. Patient offered wide local excision with neck dissection. The patient was received post-operative radiotherapy. Primary pilomatrical CS is a not common tumour. In English literature only few cases are reported. If scalp is considered, then site wise only one case was reported in 2019 by Luong et al. He and his team reported first case of spindle cell carcinoma of scalp. They report an old lady presented with scalp growth. Diagnosis obtain by histopathological examination of resected specimen (Hanh Luong et al., 2020).

Mori D et al describes CS as a very uncommon tumour. He reported old female with scalp mass in left temporal region. Pathogical examination reveals combination of basaloid cells, spindle cells, and "shadow" or "ghost" cells. The diagnosis was suggestive of pilomatrical carcinosarcoma3. Pilomatrix carcinoma is rapidly progressive cancer. Nishioka M et al report a case of pilomatrix carcinoma in 40 year man with scalp growth . initial this growth was slowly enlarging but recently it changes its behaviour and start growing rapidly. Ethan Y Song et al reported two cases a one male of a 57-year with a nonhealing ulcer treated by excision with clear margins with flap reconstruction. Other one was a old lady of 70 years old, having slow progressive scalp tumour but infiltrating skull bone along with duramater. Hence extensive surgery was done save her life with major free flap reconstruction. These all cases were bear similarity with present case. A number of related studies to different carcinoma were reported 6-10. Other related articles were reviewed.

CONCLUSION

cutaneous carcinosarcomas are known for better prognosis than visceral Counterparts, Nonhealing ulcers of the scalp must examined with due care along with histopathological examination to rule out hidden cancer. As very less number of cases reported awareness in clinician must increase about this potentially treatable condition.

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