



## SPINDLE CELL CARCINOMA IN LOWER ALVEOLUS- A CASE REPORT

## Dental Science

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## ABSTRACT

Spindle cell carcinoma, which is a rare variant of squamous cell carcinoma, has propensity to occur in the upper aero digestive tract and also the oral mucosa. We report the occurrence of this neoplasm in the right mandibular alveolus as a large exophytic growth with destruction of bone in a 74-year-old male patient where surgical resection with comprehensive neck dissection was performed. The patient on follow up is disease free with no morbidity. Spindle cell carcinoma is an uncommon tumour of uncertain histogenesis that typically arises as a biphasic polypoid tumor. Diagnosis and treatment is challenging due to its overlapping and varied features.

## KEYWORDS

Biphasic, Rare, Spindle cell.

## INTRODUCTION-

Spindle cell carcinoma is very rare in the oral mucosa. Spindle cell carcinoma (SpCC) was initially described by Virchow as sarcomatoid carcinoma in 1864 [1]. Lane in 1957 described it as a benign, reactive, stromal proliferation of tumour cells [2]. In a series of cases observed over a wide range, oral spindle neoplasms constituted only (0.7%) [3]. This tumor was once thought to be a 'collision tumor' of sarcoma and carcinoma. The World Health Organization (WHO) defines this tumor as a "carcinoma within which there are some elements resembling a squamous cell carcinoma that are associated with a spindle cell component" [4]. Spindle cell carcinoma is aggressive and early metastatic, with an untoward clinical outcome, and has been reported to have a predilection for occurrence in older males. In this report, we present the case of a 74 year old male, with no personal risk factors, who presented with Spindle cell carcinoma.

## CASE DESCRIPTION-

A 74-year-old male patient presented with a rapidly enlarging growth in the right mandibular alveolus of 6 months duration. He did not present with any habits and also significant past medical history. Extraorally, a distinct swelling in the right mandibular area was present. Intraorally, a fragile, large fleshy mass covering the buccal and lingual aspects of the right lower jaw from tooth 44 to 46 was observed. The tumor measured (T) > 4cm with palpable, 2×2 cm, firm, mobile, tender right submandibular lymph nodes and represented the clinical stage T<sub>4</sub>N<sub>1</sub>M<sub>0</sub>. Radiographic examination showed extensive destruction of the mandible corresponding of the growth, clinical appearance, and the bone destruction suggested a squamous cell carcinoma and an incision biopsy was performed. Histopathological section shows squamous mucosa with a tumor in the submucosa. The tumor is composed of spindle cells with severely pleomorphic spindly nuclei with brisk mitotic activity. Matrix resembling osteoid are seen in some foci. These features suggested a malignant neoplasm of spindle cell category. Hemimandibulectomy with comprehensive neck dissection was done on right side followed by primary closure. Patient subsequently received post op RT and is on follow up showing no recurrence and morbidity.



Fig2: Preoperative CT



Fig2: Preoperative CT

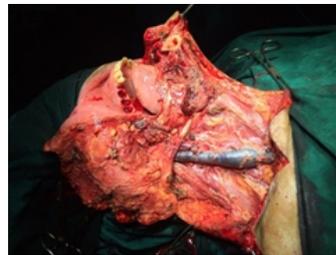


Fig3: Right side MRND

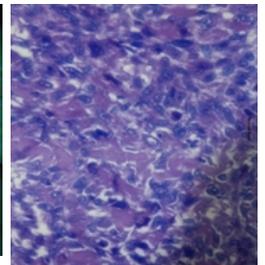


Fig4: Histopathology

## DISCUSSION-

Spindle cell carcinoma occurs more commonly (68%) among men with a mean age of 56.6 years. The lower lip (42%), tongue (20%), and the alveolar ridge/gingiva (19%) are the most frequently involved locations in the oral cavity [5]. Spindle cell carcinoma due to its various theories of histogenesis have gained names such as carcinosarcoma, sarcomatoid carcinoma, pleomorphic carcinoma, metaplastic carcinoma, polypoid carcinoma and pseudosarcomatous carcinoma [5-7] Spindle cell carcinoma most commonly involves the upper aerodigestive tract especially the larynx and hypopharynx, but rarely the oral cavity. In oral cavity it usually presents as an exophytic polypoid mass. In about 15% of cases it metastasizes to regional lymph nodes, depending on the location. In this tumour, distant metastases constitute only about 15% of cases [8]. Spindle cell carcinoma are poorly differentiated squamous cell carcinomas which leads to very high recurrence rates, even in early stage patients. Prognosis has been related to depth of invasion, polypoid exophytic growth pattern, presence of regional metastases and a history of radiotherapy. Spindle cell carcinomas should be treated like squamous cell carcinomas in the same stage, taking into account that the overall survival of Spindle cell carcinoma is poorer than with Squamous cell carcinoma. The role of chemotherapy is not yet clear and the application of radiotherapy, is also controversial [9]. Surgical intervention, with or without radiotherapy, has been shown to have better prognosis than radiotherapy alone [10].

## CONCLUSION-

Due to the aggressive nature of the disease, radical surgery with adjuvant therapy was considered in this case; owing to the metastatic potential of the tumour. Disease free survival rate in oral cases being 30% [11].

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