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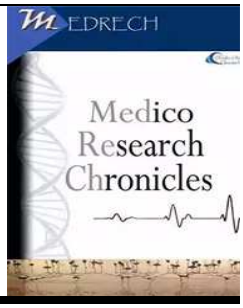

ACINIC CELL CARCINOMA: CASE REPORT

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ABSTRACT

CASE REPORT

We report on a 57-year-old male patient who was referred to an oral medicine specialist following an incidental finding of a buccal swelling. The patient presented with a swelling in the left buccal region of five years duration, not associated with pain or trauma. The patient gave no history of purulent discharge in the oral cavity, loss of appetite, or loss of weight. Examination of the left buccal region revealed a firm non-tender mobile attached swelling of size 18 X 20 mm on the left buccal mucosa. The left parotid gland duct orifice was normal. The rest of the oral cavity was found normal with no evidence of cervical lymphadenopathy. The treatment of choice was complete surgical excision followed by 3 monthly follow-ups.

INTRODUCTION

Acinic cell carcinoma (ACC) is a rare salivary gland tumor. ACC exhibits a relatively non-aggressive course (1). Complete surgical excision is the most effective treatment, and adjuvant radiotherapy is suggested when there are adverse pathologic characteristics, including a high tumor stage, neck node metastasis, high-grade transformation, and perineural and lymphovascular invasion (2). In the head and neck region, the parotid gland is the predominant site of origin and women are usually more frequently diagnosed than men (3). A slowly enlarging mass lesion in the tail of the parotid gland is the most frequent presentation. The diagnosis is usually confirmed with a fine needle aspiration biopsy, and surgical excision is the main treatment for this malignant neoplasm. ACC has a significant tendency to recur, produce metastases (cervical lymph nodes and lungs), and may have an aggressive evolution. Therefore, long-term follow-up is mandatory after treatment.

CASE REPORT

A healthy male aged 57-year-old was referred to an oral medicine specialist following an incidental finding of a buccal swelling. The swelling was raised, firm, 18 X 20 mm in size, and mobile. Magnetic resonance imaging of the oral cavity and suprahyoid neck was performed. There was a 17 mm anterior-posterior x 10 mm transverse x 18 mm well-circumscribed mucosal lesion in the posterior and superior aspect of the left

buccal mucosa. The anterior aspect of the lesion opposes the crown of the tooth 25. There is no focal hypointensity to suggest phleboliths. There are no enlarged arteries in or in the vicinity of the lesion. There is no other discrete enhancing or non-enhancing lesion in the oral cavity or the visualized part of the upper aerodigestive tract. The paranasal sinuses and nasal cavities are clear. There is no orbital or ocular abnormality. There is no abnormal parenchymal or leptomeningeal enhancement. The visualized part of the extracranial carotid and vertebral arteries demonstrate no caliber change or focal stenosis. The lesion is mildly T1 hyperintense and demonstrates small nodular enhancements medially and laterally. The appearance is not suggestive of slow-flow venous malformation. The appearance could represent a minor salivary gland tumor. An excisional biopsy is advised to confirm the exact pathology of the lesion. Excisional biopsy was taken under local anesthesia, the result revealed a salivary gland tumor with features favoring ACC. A computed tomography scan of the neck was performed with intravenous contrast. There are beam hardening artifacts from dental crown restorations and anterior maxillary dental implant fixtures obscuring details of the superior aspect of the oral cavity and the upper oropharynx. There is no definite enhancing lesion identified in the visualized part of the tongue or the oral cavity. It is conceivable the stated carcinoma is obscured by the stated beam hardening artifacts. There were several lymph nodes in the neck, none of which are suspicious by size or imaging criteria. There is no discrete focal enhancement or mass lesion in the remaining upper aerodigestive tract. No gross abnormality in the thyroid gland. No abnormality in the major salivary glands. No abnormality in the imaged intracranial compartments. There is C4-6 posterior spinal fusion. No suspicious cervical lymphadenopathy.

DISCUSSION

ACC is a rare epithelial malignant neoplasm of salivary glands. ACCs make up 7–15% of all malignant tumors arising in major salivary glands. The majority of ACCs occur in the parotid gland, and approximately 13–involve the minor intraoral salivary glands (4). The female to male ratio is approximately 1.5:1, and the age distribution is fairly even from the second to the seventh decades of life (5). Histopathologically, the tumors well-circumscribed with a distinct capsule may be solid or cystic, and distinct morphological growth patterns are seen. These are described as solid, microcystic, follicular, and papillary cystic tumors (6). They are composed of diverse cell types and include acinic cells, vacuolated cells, intercalated cells, nonspecific glandular cells, and clear cells. Large lobules or nests of tumor cells with little intervening stroma are characteristics (7). The histologic grading of acinic cell carcinomas is controversial, and unlike clinical staging, histomorphology has not proven to be reliable in predicting its behavior (8). No known imaging characteristics of parotid gland ACCs have been found on CT, MRI, or ultrasound imaging. The diagnosis of ACCs using only imaging studies is complex due to its great radiologic similarity with benign tumors (9). A CT scan usually demonstrates a slight contrast enhancement and may be appropriate for the evaluation of tumor size, involvement, relationship to facial nerves, other structures, and distant metastasis. The treatment of choice for ACCs is the complete surgical excision of the tumor by intraoral approach in this case report. Radiation therapy should be considered in cases of poor prognosis, positive surgical margins, stage T3 or T4 tumors, high histologic grade, multiple positive lymph nodal involvement, and vascular or perineural invasion (10). Cure rates are 76, 63, and 55% at the 5-, 10-, and 15-year marks, respectively. Cervical lymph node metastasis occurred in 3.8–16% of the patients. Distant metastases

(liver, lungs, and orbit) have been reported between 7 and 29%. The death rate due to ACCs varies from 1.3 to 26%. The recurrence rate for these tumors ranges from 30 to 50%, and when the deep lobe of the parotid gland is reached, local recurrences are higher than in superficial tumors (72 and 18%, respectively) (11, 12).

CONCLUSION

ACC is a low-grade malignant salivary gland tumor with the ability to metastasize and recur locally. The diagnosis of ACC using only imaging studies is complex due to its great radiologic similarity to benign tumors. The treatment of choice is complete surgical excision. Radiation therapy should be considered in cases with positive surgical margins, multiple positive lymph nodes, and vascular or perineural invasion.

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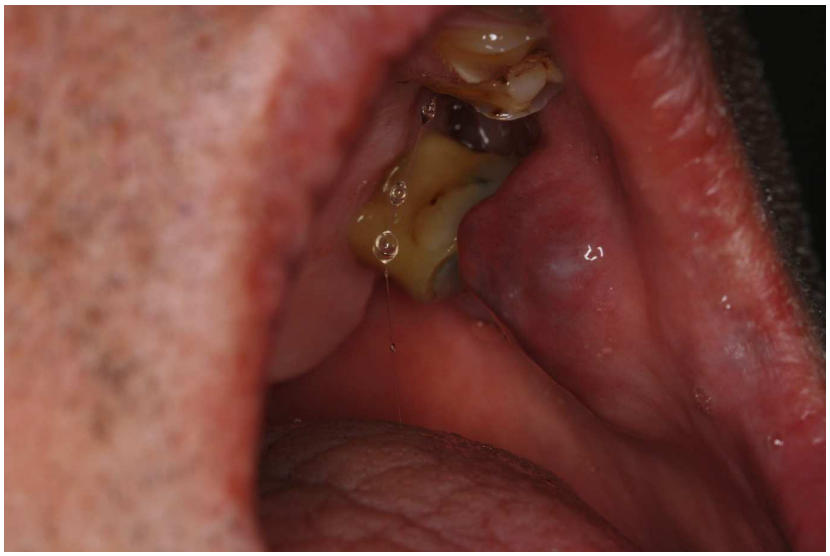
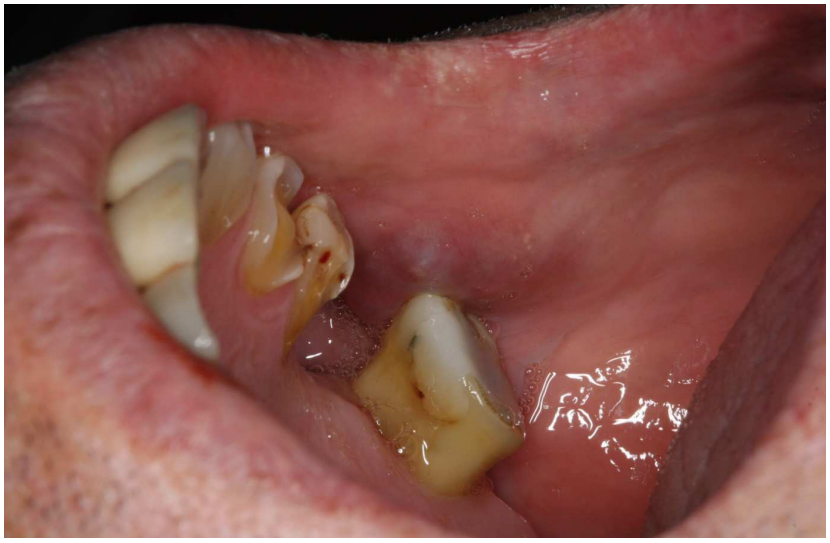
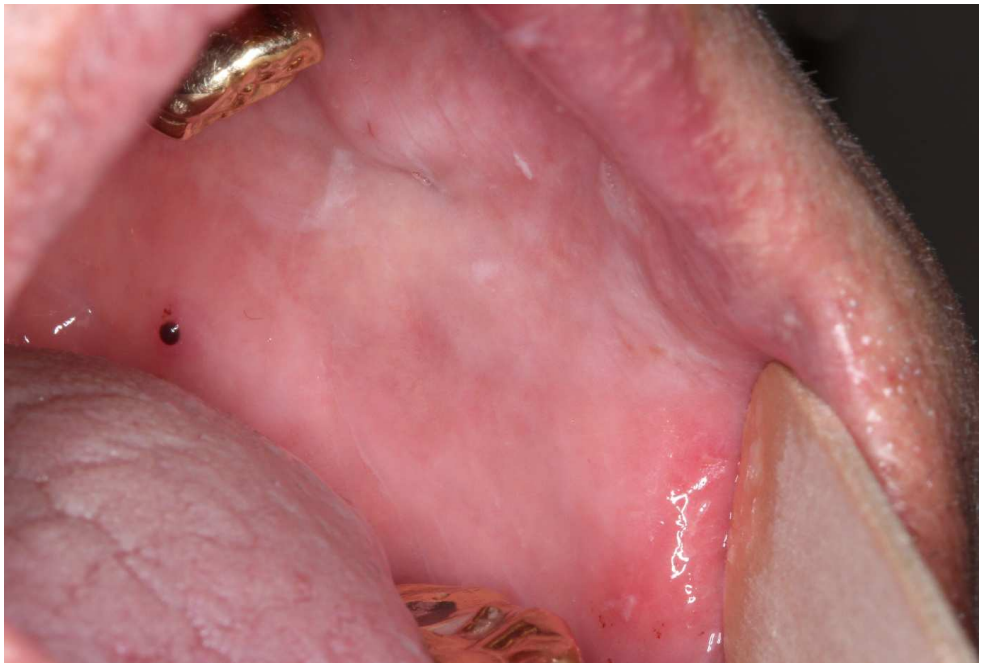


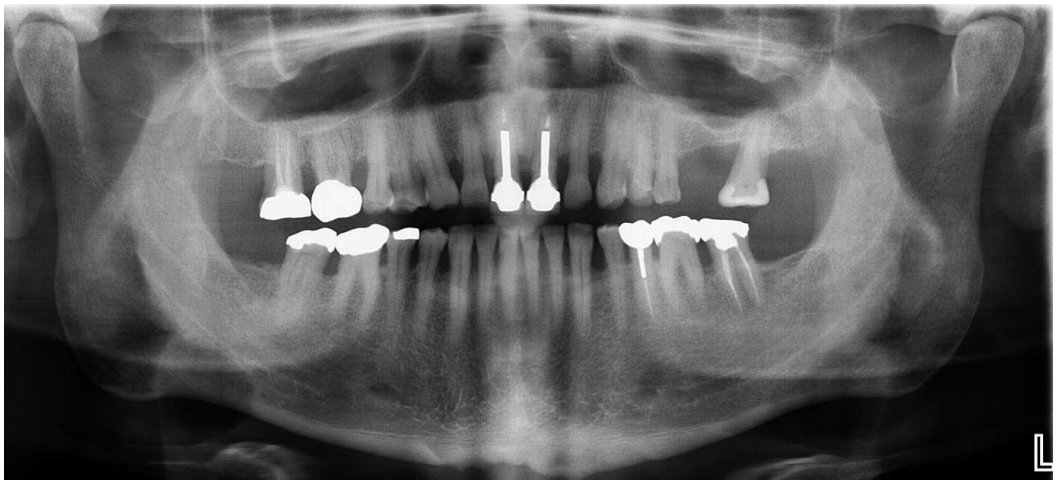
Pre-operative photographs



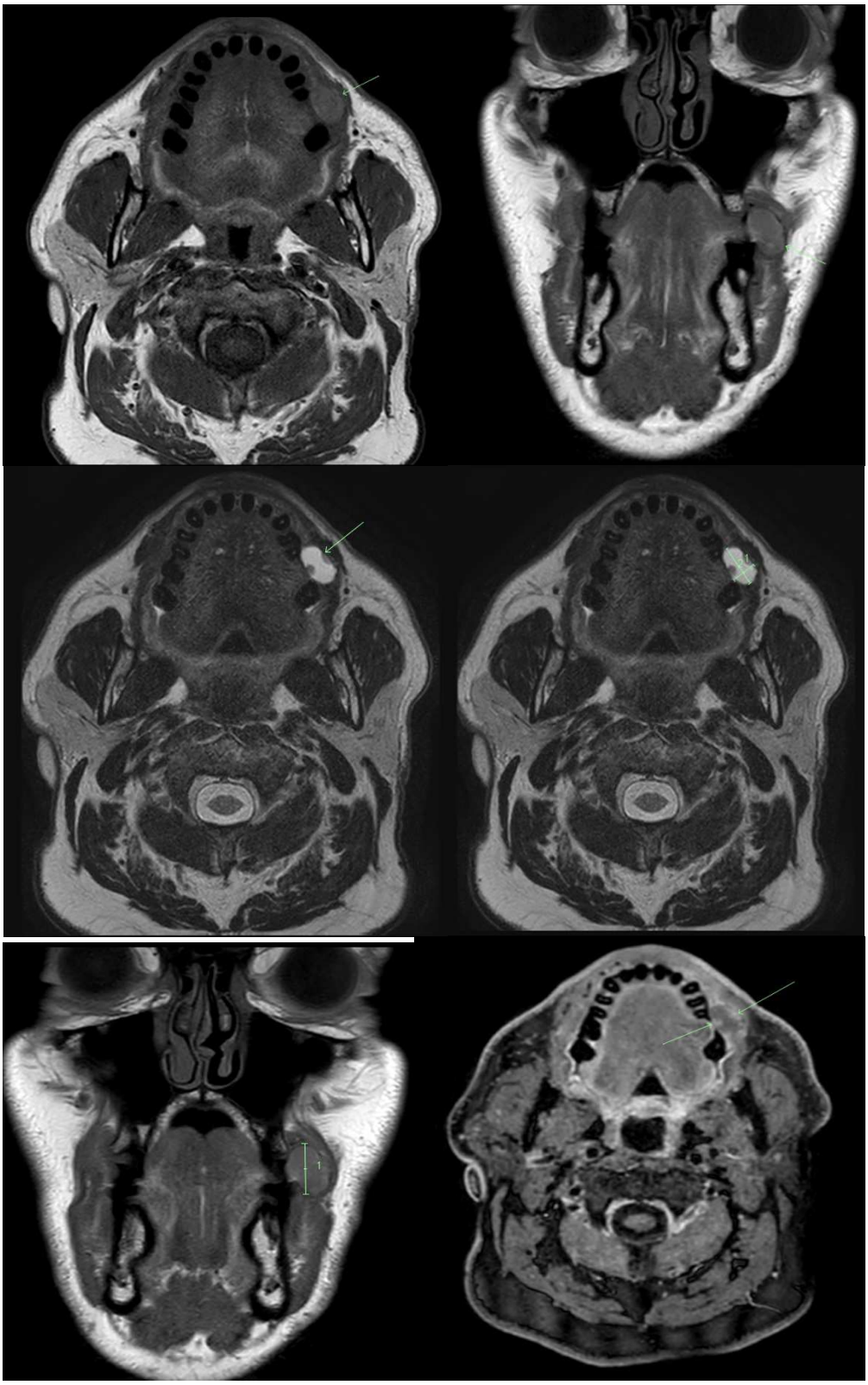
Post-operative photographs



OPG



MRI



CT Scan: