Introduction

- Odontogenic tumors comprise a group of tumors classified based on components of odontogenesis propagated in the tumor
- Ameloblastic carcinoma exhibits cytopathologic and clinical features distinguishing it from the more common ameloblastoma
- Aggressive features and metastasis to distant and regional sites are more often seen rendering prognosis poorer
- Documentation of such cases is still lacking

Objectives

- We describe a surgico-pathologically confirmed case of a large recurrent ameloblastic carcinoma
- We reviewed the existing literature on the presentation, pathogenesis, and management of this entity

The Case

- A 60 year-old female, previously managed as a case of odontogenic tumor of the maxilla, came in with a gradually enlarging mass in the previously operated site
- Nine years prior, she underwent inferior maxillectomy where frozen section and final histopathology confirmed ameloblastic carcinoma
- A slightly movable predominantly firm mass approximately 17 x 17 x 15 cm with fluctuant areas, telangiectasias, and prominent vessels was noted on the present physical examination
- Ocular findings of diplopia on primary gaze, hypertropia, and limitation of movement of the left eye were present

Imaging

Figure 1. Extraoral views. (a) frontal and, (b) left profile

Figure 2. Ocular findings (a) rightward gaze, (b) diplopia on primary gaze, and (c) leftward gaze

Figure 3. Contrast-enhanced CT images showing a heterogeneously enhancing mass arising from the left masticator space (a) axial plane, (b) coronal plane - bone window, and (c) sagittal plane - bone window

Discussion

- Ameloblastic carcinoma may exhibit benign features with a cystic appearance, or ulcerations, affectation of the teeth, resorption of bone, occasionally with a bulky tumor
- Compared to ameloblastoma, ameloblastic carcinoma exhibits cortical perforation more frequently, as well as rapid growth
- Most cases of ameloblastic carcinoma are believed to have arisen de novo, and of the cases that undergo malignant transformation, dedifferentiation usually occurs following repeated surgical resections or therapeutic radiation
- Radical treatment seems to be the preferred for treatment with some authors advocating 2-3 cm bony margins
- Features warranting adjuvant radiotherapy include positive margins post-resection, regional nodal metastasis, perineural invasion and extracapsular spread

Conclusion

- A high index of suspicion for ameloblastic carcinoma may warrant more aggressive management
- Case reports such as these may help raise awareness as to the possible clinical course and poorer prognosis
- Long-term follow-up is a must in such cases

References