ORIGINAL RESEARCH PAPER

Oral Medicine & Radiology

KEY WORDS: Ameloblastoma, Desmoplastic Ameloblastoma, Swelling, Region, Based Variants, Unicystic, Insidious Pattern, Neoplasm, True, Tooth, Surgical, Size.

MANDIBULAR ADAMANTINOMA- A CASE REPORT

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ABSTRACT

Ameloblastoma is the true neoplasm of odontogenic epithelial origin with an insidious pattern and is aggressive locally. Four different types of ameloblastoma are classified based on clinical, radiological, histological, and behavioral characteristics: unicystic ameloblastoma (UA), peripheral ameloblastoma (PA), and desmoplastic ameloblastoma.A 43-Year-old male patient reported to our department with a complaint of painless swelling in the lower left back tooth region for the past 2 months. The swelling has progressively increased and attained the current size with no history of pain and lymph node enlargement in the head and neck region. surgical removal of the mandible done in relation to 33 34 35 36 37.

INTRODUCTION:

Only 1% of all oral tumors are ameloblastomas, locally invasive tumor that originates the from the remnants of the dental lamina and odontogenic epithelium. According to the WHO In the classification of head and neck tumors, there are four types of ameloblastomas: multicystic, peripheral, desmoplastic, and unicystic ameloblastoma [1,2] Histologically, it is subclassified into:-

- Mural Type
- Intra-Luminal Type
- Luminal Type [7,8]

In 1977, Robinson and Martinez initially presented the idea of UA. The term "unicystic ameloblastoma" (UA) is derived from the tumor's macroscopic and microscopic appearance. As a large monocytic cavity with a focally ameloblastomatous lining. [3,4]

Radiographical Features:

The lesion is described as "unicystic" since it contains a multilocular defect in the jaw bones in addition to appearing unilocular [5,6]

Site: The most common site includes the mandibular posterior tooth region, especially peri-apically to the tooth region [9,10]

The current case report is distinctive because it is not only distinguishable from clinical and radiological aspects

Case Report

A 43-year-old man who had been experiencing painless swelling in the region around his lower left back tooth for the last two months visited our office. Without even any prior occurrences of pain or enlargement of the lymph nodes in the region around the head and neck, the swelling increased until it attained its current size.

The patient has no history of any ailments or unhealthy behaviors like drinking alcohol or smoking. An extraoral examination revealed facial asymmetry, As shown in **Fig. 1**, as well as a diffuse swelling measuring 4 x 3 cm in the lower left back tooth region. A hard lesion with a smooth surface, non-palpable borders, and a non-fluctuant behavior could be felt when palpated.

Inspection reveals that the swelling is a single localized left region of the face in relation to the left mandibular region which extends anteriorly from the lower border of the mandible posteriorly towards the para symphyseal region superiorly from the angle of the mouth and inferiorly from the left submandibular region which is circular in shape skin over the swelling is stretched with no pigmentation or discharge is seen.

Fig 2 depicts the intraoral pics which show the obliteration of the left buccal vestibule was seen from the distal aspect of 33 to 37 no tender on percussion absence of an "egg-shell crackling" effect was noted with no signs of crepitations and a yielding sign has not elicited.

Fig 3 depicts about Orthopantogram which reveals the presence of well-circumscribed radiolucent lesions which measures about 4x3 cm in dimensions which had been extending from the anterior part of the mandible in relation to the canine region to the para symphyseal region approximating the third molar with bony erosion which involved the mandibular canal with periapical resorption of 33 34 35 36 37. The patient has undergone a surgical procedure. Enucleation was done for the removal of cystic lesions along with involved teeth along with the flap elevation, **Histopathological(microscopic findings)** reveal fibro cellular connective tissue components which resemble the cyst wall. In some areas adjacent to the epithelium it seems sparse with delicate collagen fibers and fibroblast-like cells.

An overlying epithelium shows basal cells with polarised palisaded hyperchromatic nuclei and superficial cells resemble stellate reticulum-like cells and the periphery reveals the area of bony trabeculae has seen the infiltration of predominant inflammatory cells like, Clinical and Histopathological findings Suggestive of "Intraluminal Unicystic Ameloblastoma".

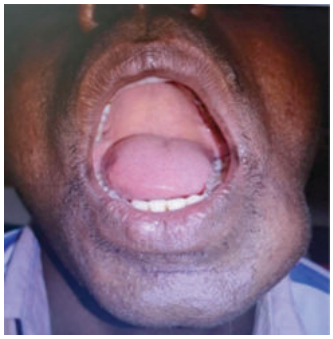

Fig. 1 Extraoral view

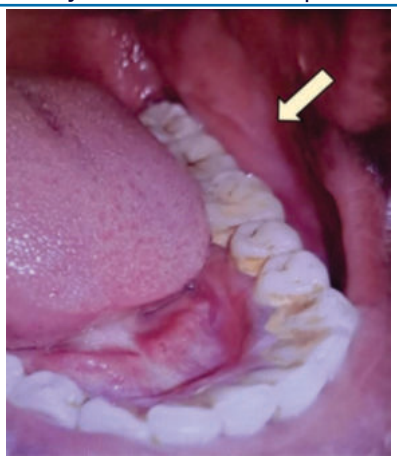

Fig. 2 Which Shows Intraoral Picture

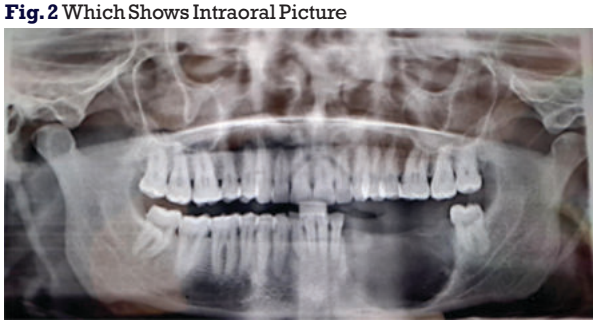

Fig 3 Post-operative OPG

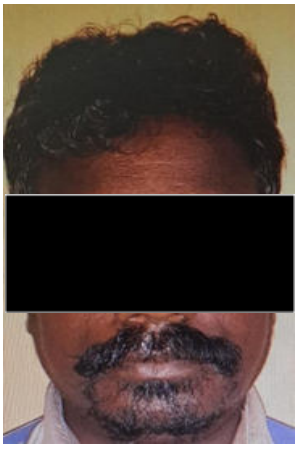

Fig.4 Post-operative picture

DISCUSSION:-

Unicystic Ameloblastoma is the distinctive type of all Ameloblastoma, which accounts for 5% Subgroup 1: Luminal UA Based on Ackerman's classification, which was modified by Philipsen and Reichart as Subgroup 1.2: Luminal and Intraluminal Subgroup 1.2.3: Luminal, Intraluminal, and Intramural types The distinctive subtype of Ameloblastoma, which accounts for 5 per cent of total cases, is unicystic.

According to Ackerman's classification, which Philipsen and Reichart modified as Subgroup 1.2: Luminal and Intraluminal Luminal, intraluminal, and intramural Subgroup 1.2.3 Luminal, Intraluminal and Intramural Types. The lesion, which had been seen in the crown of the mandibular third molar, can also be seen in the inter radicular, periapical, and edentulous regions as this unilateral cystic lesion affects the mandibular region. But in our instance, it had been seen in the lower jaw area.

The lesion, which is a painless swelling that frequently causes facial asymmetry and tooth Impaction and tooth movement has been observed. Dentigerous cysts, odontogenic keratocyst, calcifying epithelial odontogenic tumours adenomatoid odontogenic tumours, fibrous dysplasia, and cemento-osseous dysplasia are all common diagnoses.

Ameloblastoma without ice Treatments available for Subgroups 1 and 1.2 can be conservative (careful enucleation) Intramural ameloblastoma, which requires radical Resection of solid or multicystic ameloblastomas is shown in subgroups 1.2.3 and 1.3.

After enucleation, forceful curettage should be avoided since it could cause foci to penetrate. the bones deeply. For subgroups 1 and 1.2, chemical cauterization with Carnoy's solution is advised. subgroups 1.2.3 and 1.3, but even so, they have a high recurrence risk and necessitate aggressive surgical procedures.

This is because islands of ameloblastoma tumour cells may have invaded the cystic wall in some cases, and damaged the nearby cancellous bone. Histological subtypes of UA usually recur after surgery, with those invading the fibrous cells having a rate of 35% but others at 6.7%; Lin et al. According to Lau et al., enucleation alone seemed to have a recurrence rate of 30.5%. Enucleation followed by Carnoy's solution used to have a recurrence rate of 16%, and Marsupialization followed by 18% [15,16]

CONCLUSION:-

As unicystic ameloblastoma displays significant clinical and radiological similarities with odontogenic cysts and tumours, every unilocular radiolucency has been monitored and examined. Marsupialization followed by enucleation seemed to have a recurrence rate of 18%. Aspirational cytology or an incisional biopsy may be unable to fully describe the true nature of the lesion. With the risk of unicystic ameloblastoma recurrence in the future, long-term follow-up is necessary.

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