Ameloblastic fibroma of the jaw is a rare, benign, mixed, odontogenic tumor. This paper reports the management of a case of ameloblastic fibroma in an 8 year female child involving the posterior mandible by enucleation and curettage.

Keywords: Ameloblastic fibroma; Odontogenic tumors of jaws; Enucleation; Ameloblastic fibrosarcoma.

Introduction
Ameloblastic fibroma is a relatively rare neoplasm of odontogenic origin in which both odontogenic epithelium and connective tissue are participants in the neoplastic process. It accounts for 2.5% of odontogenic tumors and over 80% of the cases occur in mandible the usual site being canine-molar region. It was first described by Kruse in 1891 and Thoma and Goldman were the first to classify this tumor as a separate entity. It is more common in children than in adults and without apparent gender predilection. It appears as an asymptomatic unilocular or multilocular radiolucency, often with a sclerotic rim and may be associated with an unerupted tooth. The opinion that ameloblastic fibroma exhibits somewhat slow clinical growth and well encapsulated and shows an innocuous benign behavior was supported by most authors, thus conservative treatment in keeping the behavior of ameloblastic fibroma was recommended. Treatment is generally by enucleation and curettage as it is stated to have a low recurrence rate and has little tendency for local invasion. This paper reports the management of a case of ameloblastic fibroma in an 8 year female child involving the posterior mandible by enucleation and curettage.

Case Report
An 8 year old female patient reported to the department of oral and maxillofacial surgery for the evaluation of a painless bony hard swelling present on the mandibular body-ramus area on the left side which has been progressively enlarging for the past 2 months. Extra orally there was facial asymmetry of the left side of face. The intraoral examination revealed a large painless, soft, unilocular swelling extending from the first permanent molar to the entire ramus up to the condylar region (Figure 1). Second permanent molar was missing in the arch clinically. The mucosa overlying the swelling was normal in appearance. The ipsilateral submandibular lymph nodes were palpable. Patient had no paraesthesia on the left side. Orthopantomogram showed a large radiolucency extending from first permanent molar to the entire ramus up to the left condyle and coronoid process (Figure 2). Second permanent molar was present close to the inferior border of the mandible. First permanent molar was carious. Aspiration test was negative. The incisional biopsy was done under local anesthesia and the histopathological report suggested ameloblastic fibroma. Considering the young age of the patient and innocuous benign behavior, the tumor was treated conservatively with enucleation and curettage under general anesthesia and the tissue was sent for histopathological examination.

Microscopic Examination: The H & E stained sections showed strands and islands of odontogenic epithelium, with a peripheral row of tall columnar cells enclosing a central area consisting of cells resembling stellate reticulum. The connective tissue cells were rounded to angular in a delicate collagenous matrix (Figure 3).

There was no clinical and radiographic evidence of recurrence after 1 ½ year follow up period. Post operative X-ray s taken. Follow-up radiograph of 18 months revealed radio- opacity due to new bone formation in the residual cavity (Figure 4).

Discussion
Ameloblastic fibroma is a mixed intraosseous tumor of odontogenic origin. 80% of the cases occur in the 2nd primary molar/ first permanent molar area, and 75% are associated with an impacted tooth. It is stated to have little tendency for local invasion and a low recurrence rate. It is more common in children than adults. It has no apparent gender predilection. It appears as an asymptomatic unilocular or multilocular radiolucency, often with a sclerotic rim and may be associated with an unerupted tooth. The treatment is generally by enucleation and curettage. It is an encapsulated, non invasive mass that is readily removed. The tumor will not invade the inferior alveolar nerve bundle or even the inferior alveolar canal. Therefore nerve preservation is usually achieved. In the present case report as the patient was young, regeneration of bone in the cavity occurred within 9-12 months. In cases of extremely large and recurrent tumors, a resection followed by primary reconstruction is reasonable. Hence, enucleation and curettage alone was considered sufficient in our patient especially taking into account her young age and innocuous behavior of the lesion which was also supported by Philipsen et al. The recurrence rate of ameloblastic fibroma found by Tronstad et al was 43.5%, on the other hand by Zallen et al, it was 18.3% after reviewing the literature with 85 cases of ameloblastic fibroma. Lysell and Sund proposed the incomplete primary removal as a reason of recurrence in their cases. Approximately 45% of...
ameloblastic fibrosarcomas present clinical, radiographic, and histologic evidence of origin in ameloblastic fibromas which are untreated or incompletely treated.

Conclusion
In conclusion considering the incidence of recurrence and transformation into ameloblastic fibrosarcoma a long term clinical and radiographic follow up of at least 10 years is mandatory.

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