University J Dent Scie 2026; Vol. 12, Issue 2

Odontogenic Fibromyxoma of the Mandibular Angle in a 3-Year-Old Child: A Rare Case Report

Abstract:
Odontogenic fibromyxoma is a rare, benign but locally aggressive mesenchymal tumor that predominantly affects young adults and is infrequently reported in early childhood. Its occurrence in the mandibular angle of very young children is exceptionally uncommon. We report a case of a 3-year-old female presenting with a gradually progressive, painless swelling in the right mandibular angle region. Clinical examination revealed mild facial asymmetry with a firm, non-tender swelling, while intraoral findings were unremarkable. Orthopantomographic (OPG) evaluation demonstrated a well-defined unilocular radiolucency with cortical thinning and preservation of the inferior mandibular border.Subsequent computed tomography (CT) further delineated a well-circumscribed expansile lesion. A provisional diagnosis of juvenile ossifying fibroma was considered; however, histopathological examination confirmed odontogenic fibromyxoma. The lesion was managed by curettage, and the patient is under follow-up. Early diagnosis and long-term follow-up are essential due to the risk of recurrence.

Key-words: Myxoma, Odontogenic tumors, Mandible, Child, Jaw Neoplasms.

Introduction:

Fibromyxoma (FM) is an uncommon, benign odontogenic neoplasm characterized by slow growth, local invasiveness, and a tendency for recurrence. It was first described by Virchow in 1863 as a tumor composed of myxoid connective tissue resembling the gelatinous substance of the umbilical cord.[1–4] Depending on the proportion of fibrous and myxoid components, the lesion has been described as odontogenic myxoma, fibromyxoma, or myxofibroma.[5,6]

According to the World Health Organization (WHO), odontogenic myxoma is a mesenchymal odontogenic tumor of ectomesenchymal origin, with or without associated odontogenic epithelium. In the 2017 WHO classification, odontogenic myxoma and its fibromyxoid variants were categorized under mesenchymal odontogenic tumors, encompassing both central (intraosseous) and peripheral forms, the latter being distinctly uncommon.[1–4]

Access this article online

Website:
www.ujds.in

DOI:
https://doi.org/10.21276/ujds.2026.12.2.24

Odontogenic myxomas account for approximately 2.3–17.7% of odontogenic tumors, with reported prevalence ranging from 0.04% to 3.7%. They most commonly affect individuals in the second and third decades of life, with a slight female predilection. Occurrence in early childhood is uncommon, with few cases reported in children under 10 years. Anatomically, the mandible, particularly the premolar–molar regions more frequently involved than the maxilla.[5,6] In the Indian population, odontogenic fibromyxomas have been occasionally reported, but

[1]PARIHAR AJAY, [2]REDDY PRASHANTHI, [3]RAJPUT JAGRATI SINGH, [4]MOTWANI SIMRAN,
[1-4]Department of Oral Medicine and Radiology, Government College of Dentistry, Indore

Address for Correspondence: Dr. Jagrati Singh Rajput
Postgraduate Trainee
Department of Oral Medicine and Radiology, Government College of Dentistry, Indore-452001, M.P. INDIA
Email: jagratisinghrajput104@gmail.com

Received : 5 May, 2026, **Published :** 30 June, 2026

How to cite this article: Ajay Parihar, Prashanthi Reddy, Jagrati Singh Rajput, & Simran Motwani. (2026). Odontogenic Fibromyxoma of the Mandibular Angle in a 3-Year-Old Child: A Rare Case Report. UNIVERSITY JOURNAL OF DENTAL SCIENCES, 12(2).

involvement of the mandibular angle in children under 5 years is extremely rare. To date, only a handful of pediatric cases at this site have been documented. The present case is distinctive due to the patient's early age (3 years) and the lesion's location, highlighting the diagnostic challenges of such infrequently encountered pediatric jaw lesions and the importance of careful, conservative management.

Clinically, fibromyxomas often present as painless, slowly enlarging swellings and may remain asymptomatic for extended periods. Sensory disturbances such as paresthesia are infrequently encountered.[8] The present case report describes an exceptionally early-onset fibromyxoma arising in the mandibular angle of a 3-year-old female child.

Case Description :

A 3-year-old female child reported to the Department of Oral Medicine and Radiology with a chief complaint of swelling in the lower right posterior jaw region for the past two months. The history of present illness, as elicited from the child's mother, revealed a gradually progressive swelling involving the right mandibular angle region, with no associated history of trauma, fever, pain, or pus discharge. Extraoral examination showed a localized swelling over the right mandibular angle resulting in mild facial asymmetry. On palpation, the swelling was hard, fixed, non-tender, and afebrile, with the overlying skin appearing normal (Figure 1). Intraoral examination revealed age-appropriate dentition with no mucosal abnormalities, ulceration, or surface changes. The orthopantomogram (OPG) showed a unilocular radiolucency involving the right mandibular angle, with relatively well-defined radiopaque margins suggestive of a benign lesion. Cortical thinning was evident, with preservation of the inferior border of the mandible (Figure 2). Computed tomography (CT) with three-dimensional reconstruction revealed a well-circumscribed expansile lesion exhibiting buccolingual cortical expansion without evidence of cortical breach (Figure 3). Radiographic features were initially suggestive of an early stage of juvenile ossifying fibroma; however, histopathological examination of the biopsy confirmed the lesion to be a fibromyxoma.

List of Abbreviation:

Abbreviation	Definition
OPG	Orthopantomogram
CT	Computed tomography
FM	Fibromyxoma
WHO	World Health Organization

Table 1: Radiographic types of fibromyxoma

Type I	unilocular
Type II	multilocular
Type III	Localized alveolar involvement
Type IV	maxillary sinus involvement
Type V	osteolytic destruction
Type VI	mixed osteolysis and osteogenesis

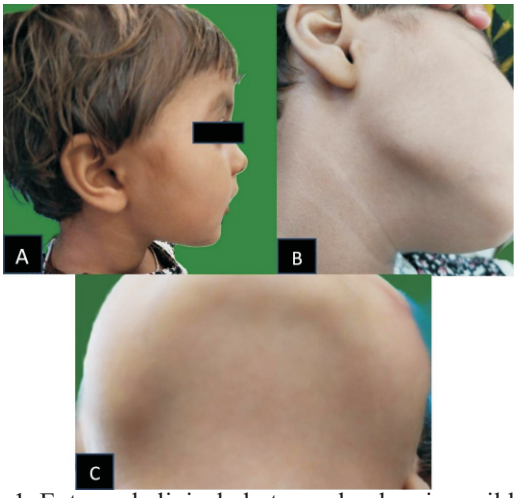

Figure 1. Extraoral clinical photographs showing mild facial asymmetry due to swelling in the right mandibular angle region.

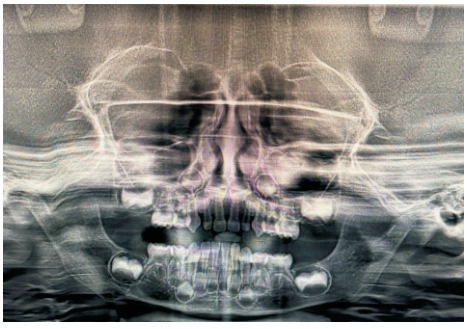

Figure 2. Orthopantomogram (OPG) demonstrating a well-defined unilocular radiolucency in the right mandibular angle with cortical thinning and an intact lower border of mandible.

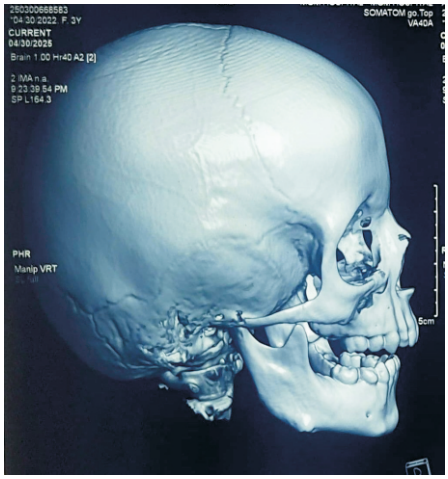

Figure 3. Three-dimensional CT lateral view showing an expansile lesion in the right mandibular angle with cortical expansion and thinning, and an intact inferior mandibular border.

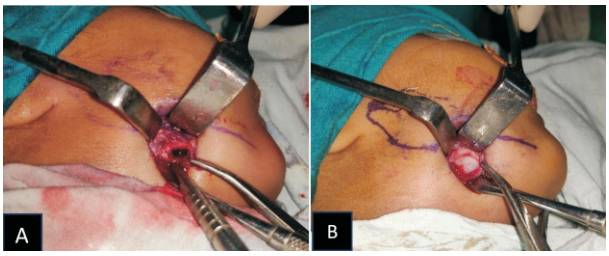

Figure 4. Intraoperative photographs showing lesion:

A) Before curettage and

B) After curettage

Discussion:

Odontogenic fibromyxoma is an uncommon benign neoplasm of ectomesenchymal origin characterized by slow growth, local invasiveness, and a tendency for recurrence. Although it most frequently occurs in the second and third decades of life, its occurrence in early childhood is rare, particularly in children younger than 10 years of age.[5,6] Odontogenic fibromyxoma has been extensively described in the literature.[9,10] The present case is distinctive due to the patient's young age and the involvement of the mandibular angle, which is an infrequently reported site in pediatric patients.

Clinically, fibromyxomas are often asymptomatic and present as painless, gradually enlarging swellings, which may delay diagnosis until noticeable cortical expansion or facial asymmetry develops.[8] In the present case, the lesion manifested as a firm, non-tender swelling with mild facial asymmetry and no associated intraoral mucosal changes, consistent with previously reported findings.

Radiographically, odontogenic fibromyxomas exhibit a wide spectrum of appearances ranging from unilocular to multilocular radiolucencies (Table 1). Characteristic internal trabecular patterns such as “honeycomb,” “soap-bubble,” “tennis-racket,” or “wispy” appearances have been described; however, these features are not consistently present, particularly in early-stage lesions.[5,6] In the present case, the lesion appeared as a well-defined unilocular radiolucency with cortical thinning, mimicking features of an early-stage juvenile ossifying fibroma, thereby posing a diagnostic challenge.

The differential diagnosis of fibromyxoma includes ameloblastoma, juvenile ossifying fibroma, central giant cell granuloma, and other myxoid lesions such as chondromyxoid fibroma and myxoid neural tumors. In addition, certain malignant lesions, including low-grade myxofibrosarcoma and cystic variants of osteosarcoma, may occasionally present with well-defined radiolucencies, further complicating the diagnostic process.[11] Therefore, careful correlation of clinical, radiographic, and histopathological findings is essential for accurate diagnosis.

Management of odontogenic fibromyxoma depends on the lesion's size, location, and biological behavior. Treatment modalities range from conservative approaches such as enucleation and curettage to more aggressive surgical resection. Due to the infiltrative nature of the tumor, recurrence rates following conservative management have been reported to range from 25% to 43%.[5,6] In pediatric patients, however, conservative treatment is often preferred to preserve jaw growth and development. In the present case, the lesion was managed by curettage with preservation of the mandibular structure (Figure 4), and the patient is under regular follow-up to monitor for recurrence.

Odontogenic fibromyxomas are infrequently reported in the Indian literature, and involvement of the mandibular angle in very young children remains exceedingly rare. This case contributes to the limited existing literature and highlights the importance of considering fibromyxoma in the differential diagnosis of pediatric jaw lesions, even in atypical age groups and locations.

Conclusion:

Fibromyxoma in early childhood is exceptionally rare, particularly in the mandibular angle. This case underscores the diagnostic challenges posed by pediatric jaw lesions with nonspecific clinical and radiographic features,

necessitating a multidisciplinary approach integrating clinical, radiographic, and histopathological evaluation. Given its infiltrative nature and potential for recurrence, early diagnosis and appropriate management are critical. Conservative treatment may be considered in young patients to preserve mandibular growth; however, vigilant long-term follow-up remains essential to detect recurrence and ensure favorable outcomes.

References:

1. Poudel P, Bajracharya B, Bhattacharya S, Bajracharya D, Singh S, Pokhrel P, et al. Odontogenic myxofibroma—report of a rare entity. *J Pathol Nepal*. 2016;6(12):1043–5. doi:10.3126/jpn.v6i12.16262.
2. Godishala Swamy SR, Naag S, Bahl S, Priyadarshini E. Odontogenic myxoma: a causality dilemma—report of a nonpareil case and review of literature. *J Oral MaxillofacPathol*. 2018;22(Suppl 1):S2-S6. doi:10.4103/jomfp.JOMFP_120_16.
3. Alok A, Hasan K, Singh S, Bhattacharya PT. Odontogenic myxoma involving maxilla: a case report. *J Indian Acad Oral Med Radiol*. 2019;31(1):70–3. doi:10.4103/jiaomr.jiaomr_173_18.
4. Meleti M, Giovannacci I, Corradi D, Manfredi M, Merigo E, Bonanini M, et al. Odontogenic myxofibroma: a concise review of the literature with emphasis on the surgical approach. *Med Oral Patol Oral Cir Bucal*. 2015;20(1):e1–6. doi:10.4317/medoral.19842.
5. Dietrich EM, Papaemmanouil S, Koloutsos G, Antoniades H, Antoniades K. Odontogenic fibromyxoma of the maxilla: a case report and review of the literature. *Case Rep Med*. 2011;2011:238712. doi:10.1155/2011/238712.
6. Kramer IRH, Pindborg JJ, Shear M. *Histological typing of odontogenic tumours*. 2nd ed. Berlin: Springer-Verlag; 1992. p. 23.
7. Hajdu SI, Vadmal M. A note from history: landmarks in history of cancer. Part 6. *Cancer*. 2013;119(23):4058–82. doi:10.1002/cncr.28319.
8. Thoma KH, Goldman HM. Central myxoma of the jaw. *Oral Surg Oral Med Oral Pathol*. 1954;7:532–540.
9. Brannon RB. Central odontogenic fibroma, myxoma (odontogenic myxoma, fibromyxoma), and central odontogenic granular cell tumor. *Oral MaxillofacSurg Clin North Am*. 2004;16(3):359–74. doi:10.1016/j.coms.2004.03.004.
10. Shah A, Lone P, Latoo S, Ahmed I, Malik A, Hassan S, et al. Odontogenic myxoma of the maxilla: a report of a rare case and review on histogenetic and diagnosticconcepts. *Natl J Maxillofac Surg*. 2011;2(2):189–95. doi:10.4103/0975-5950.94480.
11. Yoshikawa M, Karube T, Nagamine H, Muraoka W, Kizu H, Kawana H, et al. Odontogenic myxofibroma arising in the mandibular angle of a child with long-term follow-up: a case report. *TumorDiscov*. 2024;3(1):2096. doi:10.36922/td.2096.