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Radiographic Interpretation of Oro-Facial Lesions in Children – A Review

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Abstract

Jaw lesions are frequently encountered in children and some of them being completely and some partially radiopaque are mostly detected by the radiography and computerized tomography. The clinician, especially the pediatric dentist needs to have a thorough knowledge of all the orofacial lesions in pediatric patient. But there is very little literature that summarizes all of the orofacial lesions seen in pediatric patients. Therefore this article enumerates the radiographic lesions found in pediatric patients with respect to pediatric dentistry.

Key words: Jaw lesions. Radiography, Computerized Tomography, Oro Facial lesions, Children,

Introduction

In medical radiology literature there has been enough documentation about jaw lesions that are mostly radiolucent. For instance, dentigerous cysts, periapical cysts, amaeloblastomas and OKCs(Odonto Keratogenic Cyst). But for some unknown reason lesions found in pediatric patients in the case of pediatric dentistry have been ignored. Hence this article attempts to point all such lesions found in children.

The prime most important step to evaluate a radiographic jaw lesion is to categorize the lesion according to its location, relation to the tooth or the bone or the surrounding structure. Margination, presence or absence

of a halo, growth pattern of the bone, or the absence or presence of circumscription, are all the other factors that have to be considered before arriving at a provisional diagnosis and after which correlation and concurring the clinical finding with the radiological investigation can bring the pediatric dentist to a final diagnosis. Then the final step will have to be the histopathological confirmation of the lesion. The various radiographic lesion found in pediatric dentistry are as follows

- ➢ Odontogenic Cyst
- Dentigerous Cyst
- Radicular Cyst
- Residual Cyst
- Buccal Bifurcation Cyst
- Odontogenic Keratocyst
- Lateral Periodontal Cyst
- Calcifying Odontogenic Cyst
- ➢ Bone Disorders
- Idiopathic Bone Sclerosis
- Fibrous Dysplasia
- Simple Bone Cyst(Idiopathic Bone Cavity)
- ➢ Benign Tumours
- Ameloblastoma
- Calcifying Epithelial Odontogenic Tumor (Pindborg Tumor)
- Odontoma
- Ameloblastic Fibroma
- Adenomatoid Odontogenic Tumor(AOT)
- Myxoma
- Benign Cementoblastoma
- Hemangioma

Dentigerous CYST

Dentigerous cyst is a type of odontogenic cyst that usually presents itself in the second or third decade of life. Rarely it is seen to occur before the age of ten years and develops over the immature permanent tooth because of the chronic inflammation of the overlying primary tooth. It has an occurrence rate of 20% – 24% among all of the jaw cysts.[1] These cysts form between enamel of the crown of the affected tooth and the enamel epithelium and thus occurs the fluid accumulation in the surrounding area.[2] It always includes the crown of the impacted and unerupted teeth is observed mostly with mandibular third molar. They are generally asymptomatic and are accidently detected when a radiograph is advised to check for the underlying cause of the delayed eruption of the associated tooth. In the radiograph, the lesion of the cyst is found to have a well defined sclereotic border and a unilocular radiolucency, well demarcated, surrounding the unerupted tooth crown. Following is a case report by Demiriz L *et al* on dentigerous cyst in a 5 year old female child. There was a presence of a painless swelling near the lower margin of the right mandible. On Intraoral examination, there was a hard swelling that was causing a bulge in the cortical bone of the primary right mandibular molar region. There were no signs of inflammation on the adjacent mucosa. Presence of unilocular cystic lesion with sclerotic border was seen to be associated with the crown of the right mandibular premolar. Moreover, the extension of the radiolucent cystic lesion was upto the lower border of the mandible. The provisional diagnosis was indicative of dentigerous cyst after thorough clinical and radiological examination. Treatment of choice was chosen to be the surgical enucleation. However cystic lesions can have two surgical approaches i.e marsupialization and enucleation. The treatment depends on the size of the lesion, its location, cystic wall's bone integrity and the proximity of the lesion to vital structures. Marsupialization often has been considered as the choice of treatment of the dentigerous cyst as it provides a pathway for the eruption of the associated unerupted tooth, the major disadvantage

being the pathologic tissue remnants *in situ* without proper histological assessment.[4,5]

Radicular and Residual CYST

Rare in primary dentition, radicular cysts are the most common cystic lesions of the jaws. Of the total rate of occurrence of radicular cyst in primary and permanent dentitions, the figure is approximately 0.5-3.3% in primary dentition whereas it 7-54% in the latter. Mandibular molars are the most commonly associated teeth in primary dentition. [6] Origin of radicular cyst is attributed to the epithelial remnants of periodontal ligament resulting from the periapical infection and inflammation due to infiltration of inflammatory cells as a consequence of pulp necrosis, commonly involving the apex of the tooth.[7] Residual cysts on the other hand are inflammatory periodontal, radicular, dentigerous or any other cyst in the periapical region persisting post extraction of the associated tooth.[8]

Toomarian L *et al* described a rare case of radicular cyst with a primary first molar in a 5 year old boy.[9] The patient had reported with a painful swelling in the mandibular left buccal region. Past dental history revealed conventional pulpotomy with the left first primary molar and a defective amalgam restoration with recurrent caries with the adjacent second primary molar. Grade I mobility was evident with the former and a palpable expansion of the buccal cortical plate was clinically visible extending 2 x 2 cm with a prominent crepitus. A round radiolucent unilocular lesion having smooth and well defined borders measuring 22 x 23 mm was seen in the panaromic radiograph present in periapical region. The pressure exerted by the expansion of the lesion led to the pathological migration of the permanent first biscupid in close proximity of the lower border of the mandible. Differential diagnosis based on the patient's history, clinical and radiographic examinations was radicular cyst or dentigerous cyst with surgical enucleation as the choice of treatment. Treatment protocols other than this consisted of pulpotomy, restorations and extraction with band and loop space maintainer placement in the mandible.

Satyaprasad S[8] *et al* described a case of residual cyst where a patient aged 5 year reported with the chief complaint of pain, pus discharge and swelling in lower left back tooth region from past two days. Patient had a history of tooth extraction one month back. There was a history of pus discharge associated with the same tooth region which gradually increased with the intake of food. Patient took symptomatic treatment to relieve the pain through analgesics. No relevant medical history was given. Clinical examination revealed a diffuse and tender swelling on the left side of the lower border of the mandible measuring 01 x 0.75 cm. Facial asymmetry was evident. Slightly enlarged submandibular lymph node on left side which is tender on palpation was observed. Intra oral examination shows obliterated buccal sulcus and slight erythema adjacent to the extraction socket of left mandibular molar. Hard bony expansile vestibular swelling with extension from 73 to 75 was seen on palpation. Radiolucent lesion with ill- defined irregular border was seen in the intra oral periapical radiograph with respect to the extraction socket. Hazy radiolucent lesion measuring 01 x 1.5 cm was seen in the panoramic radiograph. Tooth space of 74 showed irregular ill-defined border. Buccal cortical plate exapansion was confirmed in occlusal radiograph. Thinning of buccal cortex with its expansion extending from distal aspect of 73 to beyond distal aspect of 75 measuring 3.5 x 1 cm with its internal structure being hazy was observed. Well-defined lytic lesions within the left mandible were seen in the computed tomography associated with the primary molar region with expansion of cortical plate of size 13 x 19 mm suggesting odontogenic cyst. Fine needle

aspiration cytology and histopathological examination of the contents of the lesion together with CT were indicative of infection. Provisional diagnosis indicative of infected residual cyst was made taking into account the clinical, radiographic and aspiration cytology reports and surgical curettage was considered to be the line of treatment.

Buccal Bifurcation CYST (BBC)

BBC is a rare inflammatory odontogenic cyst occurring at the buccal region of the first or second mandibular molars of children between 4 to 14 years of age. It is also described as mandibular infected buccal cyst- molar area, cicumferential dentigerous cyst, buccal bifurcation cyst and juvenile paradental cyst. WHO in 1992 named it as "mandibular infected buccal cyst".[10] Swelling at the affected area and delayed eruption are most commonly seen. Infection with drainage of pus and pain may be present.[11] However, it is often asymptomatic. Well-defined radiographic lesion can be appreciated in the radiograph circumscribing the root of the tooth involved with intact lamina dura.

Ramos LM[12] *et al* described a case of a 9 year old boy with a chief complaint of facial asymmetry. Clinical examination revealed extraoral painful swelling on the right side of the face. Intraoral findings were partial eruption of the right permanent mandibular first molar with purulent discharge and bilateral enlargement of the lower posterior alveolar ridge along with absence of the left permanent mandibular first molar. Buccal bone expansion adjacent to the mandibular first molars was present bilaterally on palpation. The panaromic radiographic findings revealed a well defined radiolucent lesion in the periapical region of left permenant mandibular first molar. A cystic lesion involving the permanent mandibular first molar was seen on the right side. Also a radiolucent area with the right and left mandibular first permanent molars and thickening of dental follicle were observed. The patient was kept on the antibiotic treatment for a week following which the pain, swelling and pus discharge subsided and surgical curettage was performed.

Odontogenic Keratocyst (OKC)

OKCs are benign intraosseous lesions of odontogenic origin accounting for 10% of the cysts of the jaw. Characteristically, they are aggressive with high recurrence rate.[13] Age distribution is wide which ranges from 8 to 82 years.[14] The occurrence is more in mandible than maxilla. Large lesions occur at the angle and ramus of the mandible.[15] Although aggressive, OKCs cause minimal bone expansion. In asymptomatic patients, large lesions cause erosion of cortical plates and involvement of surrounding structures. OKCs appear as a well-defined unilocular or multilocular radiolucency radiographically bounded by cortical margins. Predominantly unilocular lesions are seen whereas multilocular lesions are seen in around 30% of cases, most commonly in mandible.[16] Large mandibular unilocular OKCs show few and incomplete septa within the lesions. Large mandibular OKCs on panoramic radiography are visible as extensive radiolucent lesion with considerable mesiodistal dimensions and without cortical expansion. Large maxillary OKCs on the other hand, appear as expansion of alveolar bone involving adjacent structures.

Hadziabdic N *et al* described a case of a 10 year old patient with tumefaction in the frontal region of maxilla above the left deciduous canine. Deformity of maxilla with a round swelling was seen in that region. Reduction of bone to egg shell thickness and crackling sensation was felt on pressure. Pain was absent. Presence of ectopic permanent lateral incisor on left side was seen. OPG revealed longitudinally positioned, ellipsoidal radiolucency with divergence towards the roots of the adjacent teeth. The crown of the retained permanent

canine was prominent in the apical part of the radiolucency. Surgical curettage was chosen to be line treatment.

Lateral Periodontal Cyst

Lateral Periodontal cysts are generally asymptomatic, generally observed during routine radiographic examination and account for 0.8 – 1.5% of all maxillary cysts.[18] Occurrence is usually between the fifth and the seventh decades of life. No race predilection. Men are more commonly affected than women. It occurs mostly in mandibular premolar region followed by maxillary lateral incisor and canine region. The size of the cyst is usually 10 mm.[19] It does not affect the pulp vitality of the adjacent tooth. Radiographically, it appears as oval, round or tear drop like inter- radicular radiolucent area, well-circumscribed with a sclerotic margin present between the cervical margin and the apex of the tooth.[20]

Govil S[21] *et al* reported a case of a 14 year old boy with a chief complaint of forwardly placed upper front teeth since the last 4 years. . The patient gave a history of fall 5–6 years ago which caused Ellis Class II fracture with 12 and Ellis Class III fracture with 11 and 21 with absence of mobility. Radiographic examination revealed extension of the lesion was from the tip of the crest of interdental bone up to the junction of cervical and middle third along the lateral borders of the roots of both central and lateral incisors. Additionally, there was a unilocular, well- circumscribed, tear drop shaped intraosseous radiolucency with hyperostotic borders. After thorough routine blood investigations, prophylactic antibiotic coverage and histopathological examination, enucleation of the cyst was performed extraction of the adjacent tooth.

Calcifying Odontogenic CYST (COC)

COC, is a rare developmetal neoplasm/cyst of odontogenic epithelial origin and with histopathologic diversity and variable clinical behavior. WHO in 2005 renamed it as Calcifying cystic odontogenic tumour (CCOT). Occurrence is mostly before the fourth decade of life but it can occur in any age, affecting equally mandible and maxilla with no sex predilection.[22]

Desai RS[23] *et al* describes a case of a 5 year old boy with a chief complaint of a slow growing, painless swelling in the left posterior region of the mandible since 1 month. The swelling extended from the buccal vestibule of the mandibular deciduous left second molar to the edentulous mandible posteriorly. Asymptomatic vestibular bone enlargement with crepitus was evident on palpation. No significant changes were seen in the overlying mucosa related to colour and consistency. No relevant medical history was given. Panoramic radiograph showed an ill-defined unilocular radiolucency measuring 3 x 2 cm around the crown of a developing permanent left second molar.Based on the microscopic examination and icisional biopsy enucleation of the cystic lesion with extraction of the developing crown of permanent mandibular left second molar and permanent mandibular first left molar was done.

Idiopathic Bone Sclerosis

Also known as Idiopathic Osteosclerosis(IO), it is an area of increased bone production in the jaw which appears to be elliptical, round, irregular and radiopaque in shape. It has unknown origin. These asymptomatic lesions have developmental intraosseous anatomic variations and are discovered as incidental findings in radiographs taken for some other reasons. Radiographically, the lesions appear in sizes ranging from 2 or 3 mm to 1 to 2 cm.[24] The lesions may be very large and may occur between the roots, at root apexes or away from the teeth mostly in the premolar/ molar region of the mandibular arch. Radiopaque areas depicted as IO are classified as interradicular and separate, interradicular, apical and

interradicular, apical and separate[25]. In maxilla, the common location of the lesions is in the anterior region.

Sisman Y *et al*[26] published a review article in which they concluded that the age predilection ranged from 10 to 77 years with most patients being from the range of 21 to 30 years. This supports the fact that IO is rarely found in children.

Fibrous Dysplasia

It is a skeletal disorder characterized by replacement of normal bone and marrow by fibrous tissue, leading to deformity, fracture and pain. It may affect a single bone (monostotic) or multiple bones (polyostotic) and may occur in association with hyperfunctioning endrocrinopathies,including hyperthyroidism, precocious puberty, hypercortisolism, growth hormone excess, hyperphosphatemia and café au-lait skin pigmentation. Diagnosis of fibrous dysplasia is based on clinical, biochemical and radiographic findings. Majority of the patients of fibrous dysplasia have lesions in the craniofacial bones including mandible and maxilla. It causes extensive expansion of the craniofacial complex, facial disfigurement and severe malocclusion. The lesion grows rapidly leading to the expansion of bone and displacement of adjacent structures such as teeth and orbit. The disordered bone architecture and metabolic dysfunctions can affect tooth eruption and development. A number of radiological techniques are recommended for diagnosis of fibrous dysplasia. In case of dental fibrous dyplasia, panoramic and intra oral radiographs provides assessment of both the arches, maxillary sinuses, nasal cavity, mental foramina and mandibular canal.other advanced techniques include CBCT,MRI, Scintigraphy and PET. Conventional radiography of craniofacial region shows ground glass appearance, radiolucent cystic lesions, sclerotic lesions, mixed cystic and sclerotic lesions.[27] Management of fibrous dysplasia is medically complex as treatment of dental disorders must be balanced with skeletal, endocrinal disorders and general debility. Dental treatment includes orthodontic therapy and orthognathic surgery if needed to restore stable occlusion and good facial aesthetics. Unfortunately, there is a limited information on effectiveness and outcomes of dental therapies of fibrous dysplasia as clinicians have access to very small patient pools which makes dental care challenging.[28]

Simple Bone CYST

Simple bone cyst is also referred to as idiopathic bone cavity, or traumatic or solitary bone cyst. It is an intraosseous pseudocyst devoid of epithelial lining, containing serosanguineous fluids or none at all. More common in second decade of life with mandible being most commonly affected. It appears as unilocular or multilocular,radiolucent, mostly without cortical expansion, with margins that adorn the roots of the teeth affected. It is clinically asymptomatic.[29]

Silveira HA[30] described a case of a 7-year old female patient with a panoramic x-ray which showed asymptomatic, unilocular, radiolucent lesion in the body of the left mandible and anterior region. No relevant medical history or history of trauma was given. CBCT revealed large, multilocular, hypo-dense area with moderate cortical expansion in the anterior region. The diagnosis was confirmed following an exploratory surgery of the affected area during which an empty cavity was found confirming it to be a simple bone cyst.

Ameloblastoma

There are three types of ameloblastomas, i.e cystic, solid and peripheral among which the cystic variant is least aggressive.[31] First described by Vikers and Gorlin in 1970[32] that features of the early ameloblastic change occurs within the cystic wall. It is uncommonly seen in children. However, a large population of Asian patients

have shown a higher percentage of children with ameloblastoma which were younger than 20 years.[33]

Chaudhary Z *et al*[34] described a case of a 3-year old girl with the concern of an unusual appearance of a diffuse swelling on the left side of the face. The swelling had gradually increased in size over the past 6 months and was localized over the right nasolabial region obliterating the nasolabial fold. It was hard to palpate and expansion of the maxillary bone was seen. OPG revealed a radiolucent lesion with ill-defined borders partially including the calcified tooth bud of the left maxillary canine. FNAC showed clear, straw coloured fluid. Further, histological examination was performed followed by CT and finally the surgical enucleation of the lesion was done with another histopathological examination confirming the diagnosis to be a mural type of unicystic ameloblastoma with plexiform changes.

Calcifying Epithelial Odontogenic Tumour (Pindborg's Tumour)

CEOT is a rare benign odontogenic neoplasm accounting for less than 1% of all odontogenic tumours. It occurs mostly between 20 to 60 years of age, with peak being 5th decade.[35] Although rare in children, most commonly found in female child. The common location of the tumour is mandibular premolar and molar region and less frequently in maxilla. It is usually found incidentally or as a slow growing mass, mostly associated with the impacted tooth. [36] Radiographically, lesion appears as radiolucent unilocular or multilocular cyst (soap bubble appearance) with variable calcification at an early stage. However, as the lesion progresses radiopacities increases. Benign CEOT invades local structures and has a tendency for recurrence. Malignant transformation occurs in adults and is rare.[37]

Fazeli SR *et al*[38] describes a case of a 13 year old female who incidentally reported a large mandibular bone lesion during a routine dental check up. The patient was asymptomatic with no palpable lymph nodes. X- ray showed a radiolucent lesion with calcification. OPG revealed an expansile, radiolucent lesion with scattered puncate calcifications in the body of the mandible. A biopsy was performed after which surgical resection of the left side of the segmental mandible was done followed by mandibular reconstruction. Surgical removal of the lesion was done under local anaesthesia.

Odontoma

Odontomas are an abnormal mass of calcified dental tissue, representing a dental abnormality. They are of two types: complex and compound. They are most commonly occurring odontogenic tumours in the oral cavity and are known as hamartomas.[39] The etiology of odontoma is unknown. They can be discovered mostly in the maxilla with predominance in the anterior maxillary region and are mostly found in the second decade of life with more male predilection.[40]

Yadav M *et al*[41] describes a case of a 14 year old male patient with orthodontic treatment as the chief concern. Radiographic picture showed presence of multiple tooth-like radiopaque structures between the roots of 13 and 14 surrounded by a narrow zone of radiolucency. The adjacent teeth were normal. A thorough histopathological examination was done and the definitive diagnosis was made to be of a compound odontome.

Ameloblastic Fibroma

AF is a rare benign, mixed odontogenic neoplasm accounting for 2.5% of all odontogenic tumors, 80% of which occurs in the mandible molar - premolar region. It is most commonly seen in children.[42] Although the etiology is idiopathic, it is believed that it arises during odontogenic stage due to elaboration of the basal lamina without odontogenic differentiation.[43] It is generally less aggressive than ameloblastoma.[42]

Munde AD *et al*[43] decribed a cese of AF in a 1 year old female child with a chief complaint of swelling in the mandibular right posterior region since 2-3 months, which gradually kept increasing in size. Intraoral examination showed no evidence of pus or blood discharge from the swelling. The radiographic examination revealed a well defined unilocular radiolucency extending from right deciduous canine to second molar area. The girl child's parents refused for treatment. After 3 months, the patient reported back with an increased size of the swelling. Incisional biopsy was performed and the histopathological diagnosis was AF.

Adenomatoid Odontogenic Tumor (AOT)

AOTs are a benign, hamartomatous lesion of odontogenic origin with a variety of histological patterns within a stroma of mature connective tissue. It comprises of 3 to 7% of all odontogenic tumors. It occurs from dental lamina remanants and is mostly found in young patirnts between 10-19 years of age. It occurs predominantly in the anterior region of maxilla and mandible and is associated with non-erupted canines with more female predilection. AOTs have 3 clinical variants: follicular, extra- follicular and peripheral. It appears as an asymptomatic, slow growth and it's volume increases in edentulous areas related to non erupted tooth (canine), in the gingival region of maxilla and mandible of patients 8-19 years. Radiologically, in follicular type they appear as a well defined and circumscribed area associated to the crown or root of the impacted tooth. In extra follicular type the lesion is located between or over the roots of erupted tooth. In peripheral type, thinning or resorption of the cortical cortex is seen and in some cases tooth displacement without root resorption may be seen. In periapical lesions radiopacities are seen in most cases.

Castillejos RD[45] described a case of a 13 year old male patient with a chief complaint of increased volume at the left genian region. The lesion was asymptomatic, slow growing, non- movable, indurated of last one month origin. No history of facial or dental trauma or infection in the affected region was given. Full dentition with presence of left upper canine was seen. OPG revealed well circumscribed, even bordered, radiolucent lesion in the left maxillary sinus with the presence of an impacted tooth in relation to the permanent left upper canine without tooth movement or root resorption. After thorough histopathological examination surgical enucleation of the lesion and curettage of maxillary sinus was done with scarce chances of reccurence.

Myxoma

Odontogenic myxoma is a rare tumor occurring in the mesenchymal tissue of maxilla and mandible representing 3-6% of all odontogenic tumors. It has a benign character but can be aggressive locally with recurrence rate of 25% occurring usually in the 3rd decade of life with no gender predilection.[46] It is mostly asymptomatic but can present facial deformity with no associated pain or inflammation.[47] Radiographically, it is presented as a maxillary or mandibular tumor with unilocular trabeculae sometimes associated with tooth displacement. Radiolucent tumor with trabeculation can be seen in tomography.[48]

Dalbo Contrera Toro M *et al*[49] describes a case of a 2 years 5 months old male patient with chief complaint of hardening and enlargement of left maxillary region for 2 weeks. No relevant medical or trauma history was given. Clinical examination showed a 2.5 cm lesion with fibroelastic characteristics and absence of infection. Tomography revealed maxillary sinus cyst with odontogenic origin and bone erosion. After necessary investigations surgical intervention of the cyst was with enucleation and resection.

Benign Cementoblastoma

It is a benign, slow growing mesenchymal odontogenic neoplasm with unlimited growth potential derived from ectomesenchymal cells of periodontium including cementoblasts.[50] Cementoblastomas associated with primary teeth are rare, however permanent mandibular first molars are most commonly affected. It occurs mostly in mandible than maxilla with more female predilection. It appears as well-defined radiopacity with radiolucent peripheral zone radiographically.

Pathak J *et al*[51] describes a case of a 8 year old male patient with chief complaint of mild swelling and pain in the left body of mandible which gradually increased in size since past 2 months. Clinically, no extra oral swelling was present. Obliteration of vestibular space associated with deciduous mandibular left first molar alongwith mild intra oral swelling was seen. The swelling appeared diffuse and hard in consistency with expansion of the buccal cortex. It was tender on palpation. No ulceration or purulent discharge was present in the overlying mucosa and no carious tooth was present. CBCT revealed mixed, localized radiopaque-radiolucent lesion in the buccal aspect extending from the distal aspect of 32 to the mesial aspect of developing 34 and was surrounded by a uniform, thin radiolucent line. It involved the periapices of 74 and was in continuity with its roots. Inferiorly, it extended up to middle third of coronal portion of developing 33. The approximate dimensions of the lesion were 11.9 mm x 13.8 mm x 16 mm. This was followed by an excisional biopsy with the removal of the tumor en mass.

Hemangioma

It is a benign vascular tumor with 5%-10% prevalence in children less than 1 year of age.[51] Incidence rates are higher with females, premature birth, preeclampsia, low birth weight, advanced maternal age, maternal multiparity, in vitro fertilization and Caucasian ethinicity.[52] Complications include bleeding, ulceration, functional impairment and permanent facial alterations. It has spontaneous regression and therefore does not require therapeutic intervention.[53]

Santin GC *et al*[54] describes a case of a female Caucasian patient, 4 years of age. The mother gave a history of high blood pressure during pregnancy and pre mature delivery at 29 weeks. No abnormalities were seen at the time of birth, but alterations occurred at 2 months of age. After severe tumor growth therapeutic drugs were given. Oral examination showed anterior open bite and dental caries on primary mandibular first and second molars along with hypomineralisation and enamel hypoplasia. Cinical care also revealed behavioral difficulty. After radiological examination (panoramic and periapical) treatment plan was fabricated constituting of dietary and oral hygiene, dental prophylaxis, Topical APF gel application, caries excavation, placement of GIC restoration and extraction.

Conclusion

Diagnosis of radiographic jaw lesions is equally important and may be approached by categorizing the lesion according to its appearance, relation to the teeth and exact location with reference to the teeth. most radiographic jaw lesions have a characteristic imaging appearance. Awareness of the demographic distribution of these lesions and their associated clinical features and radiographic approach, is important to explore the “terra incognita” of radiographic jaw lesions in children.

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