Natal Teeth:-An Update

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Abstract

Natal teeth though a rarity, when ever presents themselves come as a surprise and throw a clinical situation which needs to be tackled carefully. They may cause a problem in feeding the new born and a possibility of being aspirated as most of the time periodontium is not fully developed. The occurrence of natal teeth has been reported from early Roman times. The exact cause of their occurrence is not known but factors from toxins to trauma have been attributed to the etiology .The natal teeth should be differentiated from similar conditions and treated accordingly. If it is deemed important to remove them space management needs to be looked into.

Keywords: Natal Teeth

Introduction

Normally primary teeth are expected to erupt at six months of age[1]. Natal teeth are present at birth and are usually a benign problem[2], natal teeth may interfere with breastfeeding, if loose and mobile, might be swallowed or aspirated during nursing[3] ,may cause ulceration on the ventral surface of tongue .Presented here is a review about the Epidemiology, etiology, clinical presentation, complications and management of natal teeth.

As early as in 59BC Romans have talked about natal teeth and natal teeth find mention in cuneiform inscriptions found at Nineveh an ancient city on the eastern bank of the Tigris River in ancient Assyria[4]. Beliefs about natal teeth varies from claims that affected children were exceptionally favored by Fate to the belief that they were doomed[2,5]. In England, infants born with natal teeth were considered destined to be famous soldiers, While those born in France and Italy were considered future conquerors of the world[3]. In China, Poland, India and Africa, affected children were considered monsters and bearers of misfortune[6].

Incidence

Although eruption of the lower deciduous incisors is normal at birth in many mammals, teeth at birth are rare in humans[2]. The incidence of natal teeth ranges from 1:2,000 to 1:3,500 live births[2,4,7,8]. Leung studied 50,892 infants delivered over 17 years and found the incidence of natal teeth to be 1:3,392 live births[2]. The condition is slightly more common in females [2,8] .Natal teeth are rare in extremely preterm infants[9].There is a racial variation in the incidence; the problem is more common among infants of some native American [10].

Etiology

Exposure to Organic compounds such as polychlorinated bi phenyls have led to infants being born with natal teeth as reported by Gladen etall [11]. Presence of organic compound beyond threshold level is known to cause natal teeth[2]. Many other factors have been associated with natal teeth including trauma, malnutrition, position of tooth germ, hormonal imbalance and exposure to environmental toxins[3,11,12].

The condition might occur as a familial trait since a positive family history has been reported in8-62% of cases[13]. Hereditary transmission of an autosomal dominant gene has also been suggested[3,4]. Hyatt reported a family in which five siblings were born with natal teeth[14].'"

Cleft lip has been associated with natal teeth wherein 2% natal teeth with unilateral and 10% natal teeth are associated with bilateral cleft[15].Syndromes such as Ellis-Vancreveld ,pierre robin,meckel-gruber, Hallermann-Streiff Syndrome are associated with natal teeth [2,4,16].

Clinical Characteristics

The most commonly affected teeth are the lower primary central incisors (85%) , followedby the maxillary incisors (1%), mandibular canines and molars (3%), and maxillary canines and molars(1%).13 The strong predilection for the lower central incisors is consistent with the normal order of eruption of primary deciduous teeth. Natal teeth usually occur in pairs[2,13] .The eruption of more than two natal teeth is rare. Masatomi et al. reported an infant with fourteen natal teeth[17].The majority of natal teeth represent the early eruption of the normal primary deciduous dentition[2,7,15] .Less than 10% of natal teeth are supernumerary[7,13,18].Natal teeth might resemble normal primary teeth in size and shape; however, the teeth are often smaller, conical and yellowish, and have hypo plastic enamel and dentin with poor or absent root development[13,18]. Most natal teeth are mobile[19].

Four clinical categories of natal teeth have been described, including a shell-like crown structure loosely attached to the alveolus by gingival tissue with no root, a solid crown loosely attached to the alveolus by gingival tissue with little or no root, eruption of the incisal margin of the crown through gingival tissue, and edema of the gingival tissue with an unerupted but palpable tooth[20,21].

Problems in Feeding

Feeding the new born is a problem with natal teeth due to, possible discomfort to the mother , sublingual ulceration (Riga-Fede disease) [22], aspiration of teeth which are mobile is also know and if aspirated can be a serious concern.

Differential Diagnosis

Natal teeth should be distinguished from bohns nodules that are multiple in no and found along buccal and lingual mandibular ridges[23].these are remnants of mucous gland tissue have a rice like appearance and will shed spontaneously.Natal teeth should also be distinguished from lymphangioma, hemartoma and epulis .

Radiographs

Distinction must be made between super numerary and early erupted natal teeth using radiographs [2,3].The radiograph will also provide information regarding natal tooths relation to the adjacent structures and root development[2,24].

Management

Unless the tooth is poorly implanted and there is a possibility of tooth's aspiration or the tooth is causing difficult in feeding it is not necessary to remove the natal teeth unless it is super numerary[2]. Riga-Fede disease is not an indication for extraction. The preferred treatment of Riga-Fede disease includes smoothing the rough incisal edges or the placement of round smooth composite resin over the incisal

edges [3,25]. Early extraction of a primary natal tooth might lead to overcrowding of the permanent teeth, since the spaces originally occupied by the extracted tooth might close and be occupied by the adjacent teeth.If the tooth extracted is a primary tooth, space supervision should be done and any intervention to manage the space if needed should be initiated.If the tooth is extracted the socket must be cureted as it may lead to growth of odontogenic remnants and necessitate future treatment[19].

References

1. Uzamis M, Olmez S, Ozturk H, et al. Clinical and ultrastructural study of natal and neonatal teeth. J Clin Pediatr Dent. 1999;23:173-177.
2. Leung AK. Natal teeth. American Journal of Diseases of Children.1986;1 40:249-25 1.
3. Cunha RF, Boer FAC, Torriani DD, et al. Natal and neonatal teeth: review ofthe literature. American Academy of Pediatric Dentistry. 2001;23:158-162.
4. Seminario AL, Ivancakova R. Natal and neonatal teeth. Acta Medica.2004;47:229-233. To EWH. A study of natal teeth in Hong Kong Chinese. Int JPaediatr Dent. 1992;2:73-76.
5. Bodenhoff J, Gorlin RJ. Natal and neonatal teeth: folklore and fact. Pediatrics. 1963;32:1087-1093.
6. Allwright WC. Natal and neonatal teeth: a study among Chinese in Hong Kong. Br Dent J. 1958;105:163-172.
7. Buchanan S, Jenkins CR. Riga-Fedes syndrome: natal or neonatal teeth associated with tongue ulceration. Case report. AustDent J. 1997;42:225-227.
8. Kates GA, Needleman HL, Holmes LB. Natal and neonatal teeth: a clinical study. J Am Dent Assoc. 1984;109:441-443.
9. Sureshkumar R, McAulay AH. Natal and neonatal teeth. Arch Dis Child Neonatal Ed. 2002; 87:F227.
10. Leung AK. Natal teeth in American Indians. Am J Dis Child. 1986;140:1214.
11. Gladen BC, Taylor JS, Wu YC, et al. Dermatological findings in children exposed transplacentally to heat-degradated polychlorinated biphenyls in Taiwan. Br J Dermatol. 1990:122:799-808.
12. Alaluusua S, Kiviranta H, Leppaniemi A, et al. Natal and neonatal teethin relation to environmental toxicants. Pediatr Res. 2002;52:652-655.
13. Zhu J, King D. Natal and neonatal teeth. ASDC J Dent Child. 1995;62:123-128.
14. Hyatt HW. Natal teeth: its occurrence in five siblings. Clin Pediotr. 1965;4:46-48.
15. de Almeida CM, Gomide MR. Prevalence of natal/neonatal teeth in cleft lip and palate infants. Cleft Palate J. 1996;33:297-299.
16. Marakoglu K, Percin EF, Marakoglu 1, et al. Anencephalic infant with cleft palate and natal teeth: a case report. Cleft Palate Craniofoc J. 2004; 41:456-458.
17. Masatomi Y, Abe K, Ooshima T. Unusual multiple natal teeth: case report. Pediatric Dentistry. 1991;1 3:170-172.
18. Galassi MS, Santos-Pinto L, Ramalho LTO. Natal maxillary primary molars:case report. J Clin Pediatr Dent. 2004;29:41-44
19. Agostini M, León JE, Kellermann MG, Valiati R, Graner E, de Almeida OP. Myxoid calcified hamartoma and natal teeth: a case report. Int J Pediatr Otorhinolaryngol. 2008 Dec;72(12):1879-83. Epub 2008 Oct 22.
20. Hebling J, Zuanon ACC, Vianna DR. Dente Natal-a case of natal teeth. Odontol Clin. 1997;7:37-40.
21. To EW. A study of natal teeth in Hong Kong Chinese. Int J Poediotr Dent. 1991;1:73-76.
22. Padmanabhan MY, Pandey RK, Aparna R, Radhakrishnan V. Neonatal sublingual traumatic ulceration - case report & review of the literature. Dent Traumatol. 2010 Dec;26(6):490-5. doi: 10.1111/j.1600-9657.2010.00926.x. Epub 2010 Sep 30.
23. Leung AK, Robson WL. Bohn's nodules. Resident & Staff Physician. 1992;38(3):28.
24. Goncalvesi FA, Birmani EG, Sugayai NN, et al. Natal teeth: review of the literature and report of an unusual case. Brazilian Dental Journal 1998;9:53-56.
25. Goho C. Neonatal sublingual traumatic ulceration (Riga-Fede disease): reports of cases. ASDC J Dent Child. 1996;63:362-364.

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