

EARLY ERUPTION**(NATAL AND NEONATAL TEETH)**

Natal teeth are (teeth present at birth) and neonatal teeth (teeth that erupt during the first 30 days) prevalence is low. About 85% of natal or neonatal teeth are mandibular primary incisors, and only small percentages are supernumerary teeth. It is common for natal and neonatal teeth to occur in pairs. Natal and neonatal molars are rare. Most studies suggest that the etiology for the premature eruption or the appearance of natal and neonatal teeth is multifactorial. A possible factor involving the early eruption of primary teeth seems to be familial, due to inheritance as an autosomal-dominant trait.

A radiograph should be made to determine the amount of root development and the relationship of a prematurely erupted tooth to its adjacent teeth. One of the parents can hold the x-ray film in the infant's mouth during the exposure.

Most prematurely erupted teeth (immature type) are hypermobile because of limited root development.

1. If the tooth is extremely mobile to the extent that there is danger of displacement of the tooth and possible aspiration, so the treatment indicated in such a case is the removal of the tooth.
2. If the tooth has sharp incisal edge that may cause laceration of the lingual surface of the tongue, so treatment is the removal of the tooth.

The preferable approach, however, is to leave the tooth in place and to explain to the parents the desirability of maintaining this tooth in the mouth because of its importance in the growth and uncomplicated eruption of the adjacent teeth. Within

a relatively short time, the prematurely erupted tooth will become stabilized, and the other teeth in the arch will erupt.

Eruption of teeth during the neonatal period presents less of a problem. These teeth can usually be maintained even though root development is limited.

A retained natal or neonatal tooth may cause difficulty for a mother who wishes to breast-feed her infant. If breast-feeding is too painful for the mother initially, the use of a breast pump and bottling of the milk are recommended. However, the infant may be conditioned not to “bite” during suckling in a relatively short time if the mother persists with breast-feeding. It seems that the infant senses the mother’s discomfort and learns to avoid causing it.

LOCAL FACTORS INFLUENCE ERUPTION

1) **Infection around the tooth**: if it is: 1. near the eruption time it cause tearing of tissues and sometimes resorption in the area resulting in early eruption. 2. If the infection occurs before long period of time it will result in late eruption because infection for long period will healed with fibrosis in the area which aid in late eruption.

2) **Supernumerary tooth**: may be of importance in late the eruption.

3) **Trauma**: any trauma may cause early shedding of primary teeth, which lead to late eruption of permanent successor teeth.

4) **Gingival fibromatosis**: Hereditary gingival fibromatosis (HGF) is characterized by a slow, progressive, benign enlargement of the gingivae, which is the most common genetic form of gingival enlargement, usually has an autosomal dominant mode of inheritance. It is also referred to as elephantiasis gingiva or hereditary hyperplasia of the gum. The dense fibrous tissue often causes displacement of the teeth and malocclusion, also it may prevent eruption of teeth and treatment usually is gingivectomy.

5-ANKYLOSED TEETH:

Application of the term submerged molar to this condition is inaccurate, even though the tooth may appear to be submerging into the mandible or maxilla. This misconception results from the fact that the ankylosed tooth is in a state of static retention, whereas in the adjacent areas eruption and alveolar growth continue. Ankylosis should be considered an interruption in the rhythm of eruption and that a patient who has one or two ankylosed teeth is more likely to have other teeth become ankylosed. The mandibular primary molars are the teeth most often observed to be ankylosed. In unusual cases, all the primary molars may become firmly attached to the alveolar bone before their normal exfoliation time. Ankylosis of the anterior primary teeth does not occur unless there has been a trauma. The cause of ankylosis in the primary molar areas is unknown. It may follow a familial pattern. There is a relationship between the congenital absence of permanent teeth and ankylosed primary teeth.

Normal resorption of the primary molar begins on the inner or lingual surfaces of the roots. The resorption process is not continuous but is interrupted by periods of inactivity or rest. A reparative process follows periods of resorption. In the course of this reparative phase, a solid union often develops between the bone and the primary tooth. This intermittent resorption and repair may explain the various degrees of firmness of the primary teeth before their exfoliation.

Extensive bony ankylosis of the primary tooth may prevent normal exfoliation and the eruption of the permanent successor. If ankylosis occurs early, eruption of the adjacent teeth may progress enough that the ankylosed tooth is far below the normal plane of occlusion and may even be partially covered with soft tissue. An epithelium-lined track, however, will extend from the oral cavity to the tooth. Ankylosis may occasionally occur even before the eruption and complete root formation of the primary tooth. Ankylosis can also occur late in the resorption of the primary roots and even then can interfere with the eruption of the underlying permanent tooth.

The diagnosis of an ankylosed tooth

It is not difficult to make, Because:

1. Eruption has not occurred and the alveolar process has not developed in normal occlusion, the opposing molars in the area seem to be out of occlusion.
2. The ankylosed tooth is not mobile, even in cases of advanced root resorption.
3. Ankylosis can be partially confirmed by tapping the suspected tooth and an adjacent normal tooth with a blunt instrument and comparing the sounds. The ankylosed tooth will have a solid sound, whereas the normal tooth will have a cushioned sound because it has an intact periodontal membrane that absorbs some of the shock of the blow.
4. The radiograph is often a valuable diagnostic aid. A break in the continuity of the periodontal membrane, indicating an area of ankylosis, is often evident radiographically.

The management of an ankylosed tooth

Early recognition and diagnosis are extremely important.

- 1) The eventual treatment may involve surgical removal. However, unless a caries problem is unusual or loss of arch length is evident, the dentist may choose to keep the tooth under observation.
- 2) A tooth that is definitely ankylosed may at some future time undergo root resorption and be normally exfoliated. When patient cooperation is good and recall periods are regular, a watchful waiting approach is best.
- 3) For primary teeth: In situations in which permanent successors of ankylosed primary molars are missing, attempts have been made to establish functional occlusion using stainless steel crowns, overlays, or bonded composite resins on the affected primary molars. This treatment is successful only if the eruption of

permanent teeth is still in state of active eruption they will be seen by pass the ankylosed tooth.

4) For permanent teeth: The incomplete eruption of a permanent molar may be related to a small area of root ankylosis. The removal of soft tissue and bone covering the occlusal aspect of the crown should be attempted first, and the area should be packed with surgical cement to provide a pathway for the developing permanent tooth. Unerupted permanent teeth may become ankylosed by inostosis of enamel. This process follows the irritation of the follicular or periodontal tissue resulting from chronic infection. The close association of an infected apex with an unerupted tooth may give rise to the process. In the unerupted tooth, enamel is protected by enamel epithelium. The enamel epithelium may disintegrate because of infection (or trauma), the enamel may subsequently be resorbed, and bone or coronal cementum may be deposited in its place. The result is solid fixation of the tooth in its unerupted position.