

ORAL

3) Primary dentition. Formation, stages, and characteristics.

1. Eruption of primary teeth:

- 1st primary incisors - 6-8 months
- 2nd primary incisors - 8-12 months
- 1st primary molars - 12-16 months
- primary canines - 16-20 months
- 2nd primary molars - 20-30 months

The eruption of the 1st primary incisors is called early eruption if it happens before the 4th month and late eruption if it is after the 12th month!

Regarding all primary teeth the eruption is called LATE when it is 6 months later than the initial term and 2 months later than the final term!

2. Formation of the primary dentition :

This stage continues until 2.5 - 3 years of age -> all primary teeth should be erupted till this age!

3. Formation of the roots of the primary teeth:

The completion of the development of the roots of the primary teeth is up to 2 years after their eruption and the resorption of the roots starts 1-2 years after the development of the roots is finished.

The primary dentition stage extends from the eruption of primary teeth until the eruption of 1st permanent tooth (at 6 yrs).

4. Normal shape of the dental arches:

Both upper and lower dental arches in primary dentition have a semicircle shape, unlike the dental arches in permanent dentition - the upper arch has a semi-ellipse shape and the lower arch - parabola shape.

In the primary dentition the curve of Spee is almost absolutely missing.

5. Deviation from the norm regarding the existing spaces between the teeth in primary dentition:

The primary dentition normally develops with diastemas and tremas and their presence is very important, because they compensate the difference between the mesiodistal widths of the primary teeth and the permanent teeth which replace them. So we assume as a deviation from the normal development of the dental arches a primary dentition without diastemas and tremas (according to Vladislavov), whereupon in 3/4 of the clinical cases irregular alignment of the permanent incisors is observed. If the primary teeth are rotated and crowded the prognosis is for unfavorable alignment of the permanent incisors in almost 100% of the cases (a symptom of teeth size - jaw size discrepancy)!

6. Stage of stable primary dentition :

This stage is between 2,5 -3 years of age and 5,5 - 6 years of age, i. e. until the first primary incisor exfoliates!

7. Preventive procedures during primary dentition; elimination of bad oral habits; control of the eruption of the primary teeth :

- The 1st appointment of the child at the dentist's office is before the 3rd month after birth and it is very important to advise the mother about the most physiological way of feeding the baby.
- 2nd visit of the child at the dentist's office - at 1-1,5 year of age - the eruption of the primary teeth should be monitored and it is important for the child to be fed with a spoon, to drink liquids from a cup in order not to hold food under the tongue and also the child should eat natural and solid food not soft and squashy food and so the persistence of the " infantile swallowing "after the development of the primary dentition can be eliminated!
- The next dental examination of the child is usually after the full eruption of all primary teeth at the age of 2,5-3 years and afterwards at least every 6 months !

- The stage of stable primary dentition is exclusively favorable for prevention of the malocclusions, because :

- the primary dentition is absolutely formed and stable
- the mental development of the child allows us to have the necessary contact with her/him and so we can expect a collaboration
- in this age most of the etiological factors, responsible for the development of the malocclusions, are acting
- if the etiological factors are eliminated a self-correction of some of the present malocclusions can be expected
- the stage of the primary dentition is long enough for conducting of an effective preventive measures and realization of orthopedic effect- namely to create the appropriate conditions for normal development and interrelation of the jaws
- the main purpose of the general practitioner is to find and eliminate the basic etiological factors for development of the malocclusions with the help of the parents

BAD ORAL HABITS :

THUMB SUCKING:

Most often the parents find this habit. The approach depends on the age - when a baby is trying to put its finger in the mouth we simply need to pay more attention to the child and to gently remove the finger from the mouth or to replace it with a pacifier (NUK type). After the age of 3 years we can make contact with the child

and we must try to persuade him or her that the thumb sucking is deleterious so we can expect a collaboration in the elimination of the bad habit. We can use rough woolen mitts, sewn to the sleeves of child's pajamas, that are really unpleasant for sucking or some kind of mechanical barrier that stops the finger and the recurrence of the habit - different prefabricated interceptive appliances (trainers) or oral screen, according to Kraus.

MOUTH BREATHING:

Again we receive the information for the presence of this habit from the parents, but it is our obligation to find out if this mouth breathing is due to obstruction of the nasal breathing or it is simply a habit without any morphological obstructions in the airways. In our office we can ask the child to put some water in the mouth and to hold it for 1 minute. If the child can't breathe through the nose due to some obstructions, she/he will open the mouth, because mouth breathing is a necessity in these cases. For elimination of this bad habit we can use again the prefabricated interceptive appliances trainers or oral screen, according to Kraus.

TONGUE THRUSTING AND PERSISTENT INFANTILE SWALLOWING:

After the birth the baby swallows as he/she places the tongue between the edentate alveolar crests. This type of swallowing is called "infantile" passes into swallowing with teeth in contact after the development of the primary dentition. This incorrect swallowing after 3 years of age is recognized by the dentist. Clinically we can put our fingers under the lower border of the mandible or index fingers of both hands over m. masseter in the angles of the mandible so we can feel the contraction of muscles during swallowing (normal swallowing is with teeth in contact). We can determine if there is a contraction of m. mentalis during swallowing by placing our thumbs on the chin. Simultaneously with the examination of the muscles we must retract the lip corner so as to assess the interrelation between the tongue and the teeth. Incorrect swallowing can be accompanied by so called "specific facial expression/grimace ". The elimination of the incorrect swallowing should be performed after the primary dentition is fully developed and when infantile swallowing drops out. There are 3 basic and effective exercises:

- a) we must show the place of the incisive papilla to the child where he/she should place the tip of the tongue. And he/she must practice to hold the tip of the tongue there simultaneously with opening and closing the mouth in order to get used to the normal position of the tongue.
- b) the 2nd exercise for the child is to swallow with teeth in contact (clined teeth) without seeing the tongue between the teeth as he controls himself in a mirror. With the 1st and the 2nd exercise the voluntary swallowing is normalized.
- c) in order to normalize the reflex swallowing the child places a mint candy on the back of the tongue near its tip and after that she/he presses the candy against the palate .Mint candy stimulates the secretion of saliva ,which the child must swallow without dropping the candy until it is fully melted.