

# ORAL HABITS

**Is the action which by repetition become spontaneous**

Oral habits are:-

- Thumb sucking.
- Tongue thrusting.
- Mouth breathing
- Bruxism
- Nail biting
- Lip biting.

## **Thumb & Finger Habits**

About two thirds are ended by 5 years of age. The types of dental changes that a digit habit may cause vary with the intensity, duration, and frequency of the habit as well as the manner in which the digit is positioned in the mouth.

-Intensity is the amount of force that is applied to the teeth during sucking.

-Duration is defined as the amount of time spent sucking a digit

-Frequency is the number of times the habit is practiced throughout the day

**The most common dental signs of an active habit are reported to be the following:**

-Anterior open bite

-Facial movement of the upper incisors and lingual movement of the lower incisors. The result is an increased overjet and, by virtue of the tipping, decreased overbite

-Lips:-Upper lip may be short and hypotonic

Lower lip is hyperactive



-Maxillary constriction (decreased hard palate width) with can result in posterior crossbite.

Extraoral Examination :-(i) The digits:-Digits that are involved in the habit will appear reddened, exceptionally clean, chapped & short fingernail (dishpan thumb)Fibrous roughened callus may be present on superior aspect of finger.

### **Treatment of Thumb & Finger Habits**

-At first consultation with his family and with him.

-The second approach, reminder therapy, is appropriate for those who desire to stop the habit but need some help.

-An adhesive bandage secured with waterproof tape on the offending finger can serve as a constant reminder.

-Another approach is to paint a commercially available bitter substance on the fingers that are sucked.

-The two appliances used most often to discourage the sucking habit are the quad helix and the palatal crib

The quad helix is a fixed appliance commonly used to expand a constricted maxillary arch –a common finding accompanied by posterior crossbite in NNS patients.

The palatal crib is designed to interrupt a digit habit by interfering with finger placement and sucking satisfaction.

The palatal crib is generally used in children in whom no posterior crossbite exists.

It may, however, also be used as a retainer after maxillary expansion with a quad helix in a child who has not stopped sucking with quad helix.

For a palatal crib, bands are fitted on the permanent first molars or primary second molars. A heavy lingual arch wire (38 mil) is bent to fit passively in the palate and is soldered to the molars bands.

The parent and child should be informed that certain side effects appear temporarily after the palatal crib is cemented.

Eating, speaking, and sleeping patterns may be altered during the first few days after appliance delivery, these difficulties usually subside within 3 days to 2 weeks. An imprint of the appliance usually appears on the tongue as an indentation .

Habit discouragement appliances should be left in the mouth for 6 to 12 months as a retainer.

The palatal crib usually stops sucking immediately least another 6 months of wear to extinguish the habit completely.

The quad helix also requires a minimum of 6 months of the treatment. Three months are needed to correct the crossbite, and 3 months are required to stabilize the movement.

### **Pacifier Habits**

Dental changes created by pacifier habits are largely similar to changes created by thumb habits, and no clear consensus indicates a therapeutic difference.

Anterior open bite and maxillary constriction occur consistently in children who suck pacifiers.

Pacifier habits appear to end earlier than digit habits



## **Lip Habit**

Habit that involve manipulation of the lips and perioral structures

### **LIP appearance**

Red, inflamed, and chapped lips and perioral tissue during cool weather. The result is a proclination of the maxillary incisors, a retroclination of the mandibular incisors, and an increased amount of overjet.

### **TREATMENT**

By the orthodontic appliance like lip bumper & oral screen and treat the malocclusion



## **Tongue thrusting**

Definition:--> The forward movement of tongue tip between the teeth to meet the lower lip during deglutition and in sounds speech so that tongue becomes interdental

Clinical features :

- Extra oral

(1) Lip Posture :- Lip separation is more both at rest & in function

(2) Mandibular movement :- Path of mandible movement is upward & backward with tongue movement forward.

(3) Speech : Lipsing problem in articulation of s/n/t/d/ l/th/z/v/ sounds.

(a) Facial form :- increase anterior facial height

- Intraoral

(1) Tongue posture:-Tongue tip at rest is lower because of anterior open bite present

(2) Tongue movement :- Movement is irregular from one swallow to another.

- Malocclusion:-

In maxilla Proclination of maxillary anterior .

→ An increase over jet

→ Maxillary constriction

→ Generalized spacing between teeth.

In Mandible :- Retroclination of mandible

Management:-It is aimed at teaching the child correct positioning of tongue

1) Patient is instructed to put the tip of tongue at correct positions and swallow with Lip pursed and teeth in occlusion

.2) Training to correct swallow and posture of tongue.

- 3) Flat sugarless fruit drop can be placed on back of the tongue & it is held against the palate in the correct position until it is completely dissolving twice a day.
- 4) When patient learn normal tongue position this has to be reinforced and made into on unconscious act.
- 5) Appliance therapy used can be either fixed with band palatal rake or removable with adam's clasp.
- 6) Nance Palatal Arch Appliance – in this acrylic button can be used as to guide the tongue in right position.
- 7) Removable appliance therapy
- 8) Fixed Habit breaking Appliance

### Mouth breathing habits

□ Definition:- Sassouni (1971) Mouth breathing as habitual respiration through the mouth instead of the nose.

□ Etiology:- It is estimated that 85% mouth breather suffer from some degree of nasal obstruction

1. Developmental Anomalies like abnormal development of nasal cavities .

2. Partial obstruction in deviated nasal septum and Localized benign tumor.

3. Infection inflammation of nasal mucosa as:- Chronic allergic, chronic atrophic Rhinitis, Enlarged adenoid tonsils

(4) Traumatic injures of nasal cavity

(5) Genetic Pattern

Clinical Features: -

Facial appearance of child with mouth breathing habit is termed as Adenoid facies.

Long narrow face.

narrow nose and nasal passage.

Short upper lip.

Nose tipped superiorly

Expressionless face.

θ Dental effect (intra oral)

Protusion of maxillary incisors

Palatal vault is high.

Increase incidence of caries.

Chronic marginal gingivitis.

Diagnosis :-

(1) History:- The parents can be questioned whether the child adopts frequent lip apart posture & frequently occurrences of tonsillitis, allergic rhinitis.

(2) Examination:-

(i) Observe the patient unknowingly while at rest in a nasal breather

– lip touch lightly in mouth breather

– Lip are kept apart.

(ii) Patient asked to take deep breath Nasal breather keep the lip tightly closed Mouth breather take deep breath keeping mouth open.

(iii) Clinical test: -

(a) Mirror test:- Double side mirror is held b/w the nose and mouth fogging on the nasal side of mirror indicate nasal breathing while fogging toward the oral side indicate oral breathing.

(b) Water test:- The patient is asked to fill the mouth with water, and hold it for a period of time. While nasal breather accomplishes with ease, mouth breather find the task difficult.

(c) Cotton test:- A butterfly shaped piece of cotton is placed over the upper lip below the nostril. If cotton flutters down it indicate nasal breathing.

Management:-

1) Elimination of the cause- If nasal or pharyngeal obstruction has been diagnosed then removal of the cause is done by surgery .

2) Interception of the habit-

a) Physical Exercise

b) Lip Exercise

3) Oral Screen — The most effective way to reestablish nasal breathing is to prevent air entering the oral cavity .

holes should be found in it and begin to close it gradually.

### **Bruxism**

Bruxism is a grinding of teeth and is usually reported to occur while a child is sleeping.

Masticatory muscle soreness and temporomandibular joint pain have also been attributed to bruxism.



The exact cause of significant bruxism is unknown, although most explanations center around local, systemic, and psychological reasons.

The local theory suggests that bruxism is a reaction to an occlusal interference, high restoration, or some irritating dental condition.

Systemic factors implicated in bruxism include intestinal parasites, subclinical nutritional deficiencies, allergies, and endocrine disorders.

The psychological theory submits that bruxism is the manifestation of a personality disorder or increased stress.

Treatment should begin with simple measures. Occlusal interferences should be identified and equilibrated if necessary.

If occlusal interferences are not located or equilibration is not successful, referral to appropriate medical personnel should be considered to rule out any systemic problems.

If neither of these two steps is successful a mouthguard like appliance can be constructed of soft plastic to protect the teeth and attempt to eliminate the grinding habit.

If the bruxism appears to be a stress response, stress management, behavioral therapy, or biofeedback may be effective.



## Nail biting

It is most common habit in children

- It is sign of internal tension

Etiology :-

- Persistence nail biting may be indicative of emotional problem
- Psychosomatic
- Successor of thumb sucking

Clinical features:-

- Crowding
- Rotation
- Alteration of incisal edge of incisor
- Inflammation of nail bed.

Management:-

- Patient is made aware of problem.
- Treat the basic emotional factor causing the act.
- Encouraging outdoor activity which may help in easing tension.
- Application of nail polish, light cotton mittens as reminder

Conclusion

The identification and assessment of an abnormal habits and its immediate and long-term effect on the craniofacial complex and dentition should be made as early as possible to minimize the potential deleterious effect on dentofacial Complex.

## References

- Proffit, WR, Fields, HW. 2012. Contemporary orthodontics. 5th ed. St. Louis (MO): Mosby Elsevier.
- Simon j.Littlewood and Laura Mitchell 2019 An introduction to Orthodontics Fifth Edition
- Graber TM (2000) Orthodontics Principles and practice, Missouri: Mossby C.
- T. D. FOSTER (1990) A Textbook of Orthodontics Third edition
- Textbook of Pediatric 3rd Edition Prof S.G dentistry Damle