## **EXPERIMENT NO: 05**

## **AIM OF THE EXPERIMENT:**

To study & Understand the Oral health & Hygiene.

## **THEORY:**

Oral Hygiene is the practice of keeping one's mouth clean & free of Disease & other problem (e.g. Bad breath) by regular brushing of the teeth (Dental hygiene) & cleaning between the teeth. It is important that Oral hygiene be carried out on a regular basis to enable prevention of Dental Disease & bad breath. The most common types of dental Disease are tooth decay (Cavity, dental caries) & Gum diseases, including gingivitis & Periodontitis.

The main method of prevention of various Oral diseases like dental caries, gingivitis & periodontitis is by effective Plaque removal. Self-oral hygiene maintenance is mainly by tooth brushing, mouth rinses & flossing.

- <u>OBJECTIVE OF TOOTH BRUSHING</u>: The main objective of tooth brushing include: To Prevent Plaque formation, plaque removal, cleaning the Tongue, massage the gingival tissue.
- **Brushing technique:** Brushing is the main method of self-removal of plaque & debris by an individual.
- 1. The bass or Sulcus cleaning method: It is the most accepted & effective method for the removal of dental plaque present adjacent to & underneath the gingival margin. It is most adaptable for open interproximal areas, cervical areas beneath the height of contour of enamel, exposed root surfaces. It is recommended for patients with or without periodontal involvement

**Technique:** The bristles are placed at a 45<sup>0</sup> angle to the gingiva & moved in small circular motions. Strokes are repeated around 20 times, 3 teeth at a time. On the lingual aspect of the anterior teeth, the brush is inserted vertically & the heel of the brush is pressed into the gingival sulci & proximal surfaces at a 45<sup>0</sup> angle. The Bristles are then activated. Occlusal surfaces are cleaned by pressing the bristles firmly against pit & fissures & then activating the bristles.

#### **Advantages:**

- **1.** Effective method for removing plaque.
- **2.** Provides good gingival stimulation.
- **3.** Easy to Learn.

#### **Disadvantages:**

- **1.** Overzealous brushing may convert very short strokes into scrub technique of brushing & cause injury to the gingival margin.
- 2. Time Consuming.
- **3.** In certain patients dexterity requirement is too high.
- 2. Modified Bass Technique: This method differs from bass technique in that it has sweeping

motion from cervical to incisal or occlusal surface.

**Technique:** Technique combines the vibratory & circular movement of the bass technique with the sweeping motion of the roll technique. The toothbrush is held in such a way that the bristles are at 45° to the gingiva. Bristles are gently vibrated by moving the brush handle in a back & forth motion. The bristle are then swept over the sides of the teeth towards their occlusal surfaces in a single motion. Brush position on the occlusal surface used with Bass, Stillman, Charter's method .Palatal position on incisors. Intrasulcular position of the brush at 45° angle of the long axis of the tooth.

## **Advantages:**

- **1.** Excellent sulcus cleaning.
- **2.** Good inter Proximal & Gingival cleaning.
- **3.** Good gingival Stimulation.

## **Disadvantage:**

- **1.** Dexterity of wrist is required.
- **2.** Toothbrush positioned on facial & maxilloproximal surfaces of maxillary molars palatal position on molars & pre molars.
- **3.** Modified Stillman's technique indication: Dental Plaque removal from cervical areas below the height of contour of enamel & from exposed Proximal surface cleaning tooth surfaces & gingival massage. It is recommended for cleaning in areas with progressing gingival recession & root exposure to prevent abrasive tissue destruction. A soft tooth brush is indicated for this technique.

**Technique:** The sides of the bristles are pressed against the teeth & gingiva, while moving the brush with short 'back & forth' strokes in a coronal direction. The bristles are pointed apically with an oblique angle to the long axis of the tooth. The bristles are positioned partly on the cervical aspect of tooth & partly on the adjacent gingiva. The bristles are activated with short back & forth motion & simultaneously in coronal direction. 20 strokes are applied & procedure is repeated systematically on adjacent teeth.

## Disadvantage:

Time consuming. Improper brushing can damage the epithelial attachment.

**4. Fones Method or Circular/Scrub Method:** This method is recommended for young children, physically or emotionally handicapped individuals, Patients who lack dexterity.

**Technique:** The child is asked to stretch his/her are such that they are parallel to the floor. The child is asked to draw big circles using whole arm in the air. The diameter of circles is reduced until small circle are not formed in front of the mouth. The child is now ready to make circles on the teeth with the tooth brush, making sure that all teeth & gums are covered.

# **Advantages:**

- 1. It is easy to learn.
- 2. Shorter time is required.

#### **Disadvantages:**

1. Possible trauma to gingiva.

- 2. Interdental areas not properly cleaned.
- 3. Detrimental for the adults especially who use the brush vigorously.
- **5. Vertical Method-Leonard's Method:** Vertical stroke is used. Maxillary & mandibular teeth are brushed separately.

**Technique:** The bristles of the tooth brush are placed at 90<sup>0</sup> angle to the facial surface of teeth. With the teeth edge to edge, place the brush with filaments against the teeth at right to the long axis of teeth. Brush vigorously without big pressure with a stroke which is mostly up & down the tooth surfaces with a slight rotation or circular movements after striking the gingival margin with force. It is not intended that the upper & lower teeth shall be brushed in the same series of strokes. The teeth are placed edge to edge to keep the brush slipping over the occlusal or incisal surface.

### **Advantages:**

It is the most convenient & effective for small children with deciduous teeth.

#### **Disadvantages:**

Interdental space of the permanent teeth of adult are not properly cleaned.

- **6. Charter's Method:** This method is used for
- Individuals having open inter dental spaces with missing papilla & exposed root surfaces.
- Those wearing fixed partial dentures or orthodontics appliances.
- For Patients who have had periodontal surgery.
- Patients with moderate interproximal gingival recession.

**Technique:** A soft /medium multi tufted tooth brush is indicated for this technique. Bristles are placed at an angle 45<sup>0</sup> to the gingiva with the bristle directed coronally. The bristles are activated by mild vibratory strokes with the bristle ends lying interproximally.

#### **Advantages:**

1. Massage & stimulation of marginal & interdental gingiva.

# **Disadvantages:**

- 1. Brush ends do not engage in the gingival sulcus to remove sub gingival bacterial accumulation.
- 2. The correct brush placement is limited or impossible, therefore modifications become necessary which add to the complexity of the procedure.
- 3. Requirement in digital dexterity are high.
- 7. **Scrub Brush method:** This method of brushing requires vigorous horizontal, vertical & circular motion. It is the virtual free style of the brushing scene.

## **Disadvantages:**

Not very effective at plaque removal. Too abrasion & gingival recession.

**8.** The Roll technique: This method of brushing is also known as the Rolling stroke method or ADA method or the Sweep method. It works fairly well for patients with anatomically normal gingival

tissue.

**Technique:** The bristles are placed at a 45<sup>0</sup>angle. Tooth brush is rolled across the tooth surface towards the occlusal surface. This technique requires some flexibility around the wrist.

### Advantage:

Provide gingival massage & stimulation.

## **Disadvantages:**

- **1.** Brushing too high during initial placement can lacerate the alveolar mucosa.
- **2.**Tendency to use quick ,sweeping strokes resulting in no brushing for cervical third of the tooth, since the brush tips pass over rather than into the area & likewise for the interproximal area.
- 3. Replacing the brush with filament tips directed into the gingiva may produce punctuate lesions.
- **9.** Physiologic Method or Smith Method: The Physiologic method was described by smith & advocated later by Bell. It was based on the principle that tooth brush should follow the physiologic pathway that is followed by food when it transverses over the tissues during mastication.

**Technique:** Bristles are pointed incisally or occlusally & then moved along & over the tooth surfaces & gingiva. The motion is gentle sweeping from incisal or occlusal surface over tofacial surface & progressing towards & over the gingiva. It is almost an attempt to duplicate nature's self-cleansing & gingival stimulation mechanism during mastication of food.

## **Advantages:**

- **1.** Natural self-cleansing mechanism.
- **2.** Supragingival cleaning is good.

#### **Disadvantages**:

Interdental spaces & sulcular area of teeth are not properly cleaned.

### Floss after Brushing:

As important as brushing is, flossing your teeth every day is just as important. Flossing will help to remove plaque & food particles between teeth & at the gum line & hard to reach places. Be gentle, threading the floss carefully between the tooth & braces wire. Then work it slowly back & forth under the braces. Be careful, take your time, & get under the gum line.

Brushing & flossing with braces can be a challenge. But it takes only a little extra effort, & when your braces come off & you have your beautiful new smile you'll realize it is well worth it.

## Ways to keep your teeth healthy

- 1. Don't go to bed without brushing your teeth.
- 2. Brush properly.
- 3. Don't neglect your Tongue.
- 4. Use a fluoride tooth paste.
- 5. Treat flossing as important as brushing
- 6. Don't let flossing difficulties stop you.
- 7. Consider mouthwash.
- 8. Drink more water.
- 9. Eat crunchy fruits & vegetables.

- 10. Limit sugary& acidic foods.11. See your dentist at least twice a year.

**Result**: Understood about the oral hygiene.