

Preventive Dentistry

Ø Preventive dentistry:

1. Epidemiology:

The branch of medicine concerned with occurrence and disturbance of disease.

2. Prevention:

It is most encompassing areas for a pediatric practice.

3. Preventive dentistry:

Includes management of behavior to prevent oral disease.

Ø Dental plaque and calculus:

1. Soft deposits:

- a. Bacterial plaque.
- b. Materia alba.
- c. Dental stains: extrinsic stain - intrinsic stain.

2. Hard deposits:

Calculus.

3. Preventive dentistry levels:

- a. Primary prevention.
- b. secondary prevention.
- c. Tertiary prevention.

4. Principals of learning & motivation:

- a. Concepts:
 - Learning is more effective when an individual is psychologically and physiologically ready to learn.
 - Motivation is essential for learning.
 - Meeting patient needs.
- b. Learning ladder: unawareness – awareness – self interest.

5. Mechanical removal of plaque:

- a. Manual tooth brush:
 - General objectives.
 - Methods of tooth brushing: horizontal – Fones – Leonard – Stillman – Charters – Bass – Roll.
 - Modified techniques: modified Stillman & Charters – Bass sulcular brushing.

b. Power assisting tooth brushes:

- Mechanical.
- Sonic.
- Combination of both.

6. Other mechanical devices for plaque removal:

- a. Dental floss.
- b. Inter dental brush.
- c. End-tuft brush.
- d. Tooth pick holder.
- e. Wedge stimulator.
- f. Inter dental tip stimulator.
- g. Floss holder.
- h. Floss (bridge) threader.
- i. Implant care aids.
- j. Tongue cleaners.
- k. Oral irrigators.
- l. Power removable appliances.

Ø Oral physiotherapy techniques:

1. Brushing techniques.

2. Dental flossing techniques.

3. Fluorides:

- a. Fluoride is a mineral nutrient.
- b. Fluoridation of water supply effective at one part per million.
- c. Topical fluoride agents: acidulated phosphate fluoride - stannous fluoride - sodium fluoride.
- d. Fluoride toxicity is dangerous if correct dose of fluoride is not administered.

Ø Materials used for dental preventive methods:

1. Tooth paste:

Substance applied with tooth brush or other applicator to remove bacterial plaque material and debris.

a. Active ingredients (therapeutic):

Fluoride - antimicrobial dentifrice - chemical components - stannous salt – triclosan broad spectrum – antitartar active ingredients.

- b. Inactive ingredients: they are materials that provide structure, texture, cleansing activity, color & flavor.

2. Mouth rinses:

- Cosmetic or therapeutic.
- Ingredients: oxygenated agent - chlorohexidine gluconate – phenolic related essential oils – quaternary ammonia compounds – sanguinarine – fluoride.

3. Dental sealants:

Used as application to the occlusal surface (pits & fissures) of caries free teeth.

4. Nutrition and diet analysis:

- a. Six key nutrient groups:

Proteins – Carbohydrate – Fat – Minerals – Vitamins – Water.

- b. Five food groups provide sources for a balanced diet:

- Milk and cheese group.
- Meat fish group.
- Fruit group.
- Vegetable group.
- Bread and rice group.

- c. Sank food that aids in maintenance of good oral health:

- Fresh food and vegetables.
- Cheese and eggs.
- Nuts.
- Popcorn.
- Milk.
- Sugar-free soft drink.

Ø Identification methods of plaque and calculus:

1. Identification of plaque:

- a. Disclosing agents: they are selective dyes in solution or tablet form used to identify bacterial plaque.
- b. Direct vision.
- c. Tactile.

2. Identification of calculus:

a. Visual:

- Dehydration of tooth: calculus appear as chalky white appearance.
- Transillumination: supra gingival calculus of anterior teeth appear as a dark opaque shadow.

b. Tactile.

- ### **c. Radiographs:**
- if the calculus is heavy it shows in the radiograph.