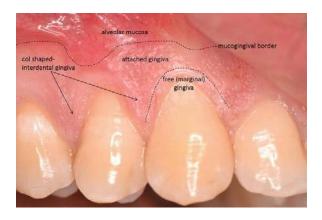
Periodontology

Periodontology: is the field of dentistry that deals with the treatment of diseases of the tissues around the teeth.

The periodontium

The periodontium serves as an attachment apparatus and is composed of four major tissues:

- A. Gingival: fibrous, epithelial tissue surrounding a tooth; may be divided into three types:
- 1. Attached: the portion that is firm, dense, stippled, and bound to the underlying periosteum, tooth, and bone.
- 2. Marginal: the portion that is unattached to underlying tissues and helps to form the sides of the gingival crevice.
- 3. Papillary: the part of the marginal gingiva that occupies the interproximal spaces.



- B. Periodontal ligaments: bundles of fibers that support and retain the tooth in the alveolar socket.
- C. Cementum: outer hard, rough surface covering of the root section of the tooth that permits the fiber attachment for tooth retention.
- D. Alveolar bone process: compact bone that forms the tooth socket; supported by stronger bone tissue of the mandible and maxilla and accepts periodontal fiber attachment.

Etiology and Symptoms of Periodontal Diseases:

Teeth acquire an adhering biofilm or pellicle, which harbors an assortment of bacterial pathogens and enables plaque to build up. The sticky white plaque that forms on the teeth and around your gums.



With the addition of calcium and phosphorus salts found in saliva and mouth fluids, a hard substance called calculus (also know as tartar) forms.



Indications of periodontal disease are:

Erythema: The gingiva is red and appears inflamed.



Edema: The tissue is overgrown from hyperplasia (excessive number of tissue cells) and hypertrophy (excessive cellular growth). The gingiva looks swollen and irritated.



Loss of stippling (spotting): Tone or tissue attachment loosens, and puffy gums become smooth and shiny.



Classification of Periodontal Diseases:

- A. Gingival disease
- B. Periodontal disease: e.g. Chronic periodontitis

Pediatric dentistry

Pediatric dentistry: is concerned with the care of the teeth and oral tissues of the child patient, from infancy through adolescence.

The dentist specializing in the practice of Pediatric dentistry is called a pedodontist.

Note: Pediatric is US Engilsh/Paediatric UK English.

The first set of teeth to erupt is called the primary dentition. This combination consists of 20 deciduous teeth, which will be replaced by secondary or permanent teeth, plus 12 more adult

Development and Growth Concerns of the Pediatric Dentition

<u>Congenital or developmental</u> problems may be:

Ectopic arrangement: a disturbance in the eruption pattern; tooth erupts out of place.

Anodontia: absence of teeth, usually of genetic origin.

Macrodontia: abnormally large teeth.



Hypodontia: congenital absence of teeth.



Enamel hypoplasia: underdevelopment of the enamel tissue.



Dentinogenesis imperfecta: incomplete or improper development of dentin tissue.



Amelogenesis imperfecta: improper development of the enamel tissue.





Dens in dente: tooth within a tooth.



Germinated (sprout): attempted division of a single tooth.



Fusion of teeth: union of two independently developing primary or secondary teeth.



Environmental or occurring problems can include the following:

Caries: dental decay; the number one disease of children.



Abscess: local collection of pus.



Cellulitis: inflammation in the cellular or connective tissue.



Occasionally, a baby is born with a tooth present, called a <u>natal tooth</u>. Teeth erupting in the first month are termed <u>neonatal teeth</u>.





Developmental Tissue and Bone Problem

Macroglossia (macro = large, glossia = tongue): enlarged tongue.



Fissured tongue: grooved division, cleft, or split of tongue.



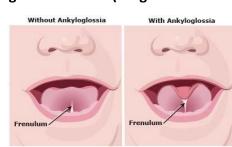
Developmental Tissue and Bone Problem

Micrognathia: abnormally small jaw; undersized mandible.



Ankyloglossia: abnormally short lingual frenum causing limited tongue movement (tongue

tied).



Abnormal labial frenum: enlarged or thick labial frenum that may cause diastema, an open area between the central incisors.



Cherubism: a genetic disorder resulting in enlargement of the cheek and other facial structures.



Candidiasis: fungus infection, thrush.





Space Maintenance

Is the placement of fixed or removable appliances to maintain or reclaim premature spacing in the arch until eruption of the secondary teeth. Some common space maintainers are the band and loop and the distal shoe appliances.