

## Gingival Diseases

**Gingivitis** is inflammation of the gingival tissue.

Gingivitis is characterized by areas of redness and swelling, and there is a tendency for the gingiva to bleed easily.

Gingivitis is limited to the epithelium and gingival connective tissues. It is important to note that there is no tissue recession or loss of connective tissue or bone

Other types of gingivitis are associated with:

- Puberty
- Pregnancy
- Use of birth control medications

Gingivitis is painless and often unrecognized until a dental professional emphasizes its importance. Improved daily oral hygiene practices will reverse gingivitis.

## **Periodontitis**

is means inflammation of the supporting tissues of the teeth.

Periodontitis is the extension of the inflammatory process from the gingiva into the connective tissue and alveolar bone that supports the teeth.

The progression of periodontitis involves the destruction of connective tissue attachment at the most apical portion of a periodontal pocket

## **Causes of Periodontal Diseases**

Dental plaque is the major factor in causing periodontal disease.

Dental calculus provides a surface for plaque to attach.

- Subgingival calculus
- Supragingival calculus

### **Systemic Conditions linked to periodontal disease:**

- Cardiovascular disease
- Preterm low birth weight
- Respiratory disease
- Diabetes mellitus

### **Risk Factors for Periodontal Disease**

- Smoking
- Diabetes
- Poor Oral Hygiene
- Osteoporosis
- HIV/AIDS
- Medications
- Stress

### **Signs and Symptoms of Periodontal Disease**

- Red, swollen, or tender gingiva
- Bleeding gingiva while brushing or flossing
- Loose or separating teeth
- Pain or pressure when chewing
- Pus around the teeth or gingival

## **Periodontal Diagnosis:**

- Recognizing a departure from normal in the periodontium and distinguishing one disease from another.
- Based on information obtained from the medical and dental histories, clinical and radiographic examination of the patient and laboratory findings.

## **Why we do diagnosis?**

- To determine whether the disease is present or not.
- Identify its types.
- Extent
- Severity
- Distribution of Underlying pathological process and their causes

## **Clinical diagnosis (First visit)**

- Overall appraisal of the patient.
  - Medical history.
  - Dental history.
  - intra-oral radiographic survey
  - Cast
  - Clinical photograph
- Overall appraisal of the patient
- Mental and emotional status.
  - Attitude
  - Physiologic age

## **Medical history**

Helps with diagnosis of oral manifestations of systemic disease And may detect systemic conditions that may be affecting the periodontal tissue response. Oral infection may affect severity of some systemic disease

It includes:

- Is the patient under the care of a physician?
- Hospitalization.
- Medications.
- Medical problems
- Occupational disease
- Abnormal bleeding
- Allergy

## **Dental history**

Current illness, dental history includes:

- Dental visit
- Oral hygiene
- Orthodontic treatment
- Pain
- Bleeding gum
- Bad taste
- Do the tooth feel loose or insecure
- Dental habits
- Previous periodontal problems

## **Intra-oral radiographic survey**

-14 intra-oral films + 4 posterior bitewing films

-Panoramic radiograph

They are helpful for the detection of developmental anomalies, pathologic lesions of the teeth and jaws, and fractures

## **Radiographs do not**

-Show periodontal pockets

-Distinguish between successfully treated and untreated cases

-Show structures on buccal, lingual, and labial aspect of tooth

-Record tooth mobility

## **full mouth series**

Look At:

-lamina dura

-crown: root ratio

-interproximal bone

-hypercementosis

-furcation involvement

-periapical pathology

-overhangs

-calculus

-resorption

### **Cast: used to study**

- Position of gingival margin.
- Inclination of teeth
- Contact relationship
- Food impaction area

### **Clinical Photograph**

To record the appearance of tissues before and after surgery

### **Oral examination**

- oral hygiene

Appraisal of cleanliness

- mal odor: may be due to

1-ANUG

2-caries

3- dehydration

4-smoking

5-dentures

6-diabetes Infections

7-alcohol

8- Food impaction

- oral cavity examination: include examination of floor of mouth, Lip, palate, tongue

Salivary glands, Oropharyngeal area and lymph node

Periodontal and periapical lesions can result in inflammation of lymph nodes

## **Examination of teeth**

Wasting disease, dental stain, hypersensitivity, proximal contact relationship, tooth mobility, trauma from occlusion, pathologic migration of teeth, sensitivity to percussion, dentition with jaw closed.

Erosion: wedge- shaped defect (enamel, dentine then cementum)

Attrition: occlusal wear result from functional contact with opposing teeth

Abrasion: saucer-shaped defect starts on cementum then dentine

Abfraction: occlusal loading surfaces causing flexure and mechanical microfractures and tooth substances loss in the cervical area

-Dental stain: It is pigmented deposits depend on the source

-hypersensitivity due to Exposed root surface

-Proximal contact relationship: By clinical observation and dental floss

-Tooth mobility

Physiologic mobility, pathologic mobility, Normal mobility, less than 1 mm

, More than 1 mm, Severe mobility faciolingually and mesiodistally combined with vertical displacement

-Trauma from occlusion

Excessive tooth mobility, Widening of periodontal space, Vertical or angular bone loss, infra bony pocket And Pathological migration

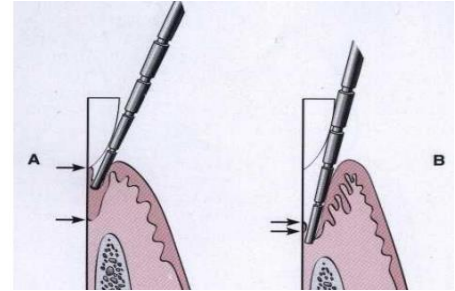
Pathologic migration of teeth may be due to:

-Tongue thrust

-Abnormal forces

-Pathologic migration of anterior teeth in young adult, may be sign of localized aggressive periodontitis

## Examination of periodontium



Plaque and calculus, gingiva, pocket

### Gingiva

Two types of gingival inflammation

- Edematous; smooth, glossy, soft and red
- Fibrotic; firm, opaque, thick and round margin

Gingival bleeding: More objective than color change.

Increase bleeding with increase inflammatory infiltrate of tissues by periodontal probe or wooden interdental cleaner.

In smokers, little or no bleeding mask the degree of inflammation.

### Periodontal pocket

- Probing is best for pocket detection
- using of gutta percha point or calibrated silver points with radiograph

### Pocket probing

The probing depth which depends on size of the probe, force, convexity, direction and the tissue resistance

**A-** In a normal sulcus with a long junctional epithelium, the probe penetrates about one third to one half the length of the junctional epithelium.

**B-** In a periodontal pocket with a short junctional epithelium (Between arrows), the probe penetrates beyond the apical end of the junctional epithelium.

### Alveolar bone loss

-Clinically by the probe; transgingival probing and Radiographic examination