CLASSIFICATION OF PERIODONTAL DISEASES
WHY CLASSIFY?

- Disease classification, ideally provides a short, but comprehensive review of all known disease processes affecting a tissue or organ.
- It helps to systematically reach a differential diagnosis, prognosis and develop a treatment plan.
Numerous classifications

(previously)

- Reasons for controversy
  - Incomplete understanding of aetiology
  - Complexity of the disease process
  - Incomplete understanding of interactions between various aetiological factors
  - Using different criteria by different investigators
1. **Disease associated with gingiva**
   ‘gingivitis’

2. **Diseases associated with other tooth supporting structures**
   ‘periodontitis’
Adult periodontitis

Early onset periodontitis
  Prepubertal (localized or generalized)
  Juvenile (localized or generalized)
  Rapidly progressive periodontitis.

Periodontitis associated with systemic diseases
  Down syndrome
  Diabetes type I
  Papillon-Lefèvre syndrome.
  AIDS
  Other diseases

Necrotizing ulcerative periodontitis

Refractory periodontitis
Current Classification

Latest classification was developed by the American Academy of Periodontology (AAP) in 1999.
CHANGES IN THE CLASSIFICATION SYSTEM FOR PERIODONTAL DISEASES

- Addition of a Section on “Gingival Diseases”

- Replacement of “Adult Periodontitis” With “Chronic Periodontitis”

- Replacement of “Early-Onset Periodontitis” With “Aggressive Periodontitis”
Gingival Diseases
Plaque-induced gingival diseases*
Non-plaque-induced gingival lesions

Chronic Periodontitis**
Localized
Generalized

Aggressive Periodontitis
Localized
Generalized

Periodontitis as a Manifestation of Systemic Diseases
Necrotizing Periodontal Diseases
Necrotizing ulcerative gingivitis (NUG)
Necrotizing ulcerative periodontitis (NUP)

Abscesses of the Periodontium
Gingival abscess
Periodontal abscess
Pericoronal abscess

Periodontitis Associated with Endodontic Lesions
Endodontic–periodontal lesion
Periodontal–endodontic lesion
Combined lesion

Developmental or Acquired Deformities and Conditions
Localized tooth-related factors that predispose to plaque-induced gingival diseases or periodontitis
Mucogingival deformities and conditions around teeth
Mucogingival deformities and conditions on edentulous ridges
Occlusal trauma
Before arriving at a periodontal diagnosis, the clinician must answer three basic questions:

1. What periodontal disease does the patient have?
2. How severe is the problem?
3. Is the disease localized or generalized?
Chapter 8 – Clinical Features of Gingivitis
GINGIVAL DISEASES

- **Plaque-Induced Gingival Diseases**
  - Most common form of gingival disease
  - Plaque is primary etiological factor
  - Clinical signs of inflammation that are confined to the gingiva
  - No attachment loss

- **Non plaque induced Gingival diseases**
COURSE AND DURATION

- **Acute gingivitis** is of sudden onset & short duration & can be **painful**
- **Chronic gingivitis** is slow in onset & of long duration, and is painless, unless complicated by acute or subacute exacerbations
  - Most common type (99%)
- **Recurrent gingivitis** reappears after having been eliminated by treatment or disappearing spontaneously
Localized gingivitis is confined to the gingiva of a single tooth or group of teeth (<30% of surfaces)

Generalized gingivitis involves the entire mouth
Marginal gingivitis involves the gingival margin

Papillary gingivitis involves the interdental papillae
- Often extend into gingival margin
- Earliest signs of gingivitis

Diffuse gingivitis affects the gingival margin, the attached gingiva & the interdental papilla
The distribution of gingival disease in individual cases is described by combining the preceding terms as follows:

Generalized + Localized + Acute + chronic + Marginal + Papillary + Diffuse + Gingivitis

Generalized chronic marginal gingivitis
Generalized chronic marginal gingivitis
Localized chronic marginal gingivitis associated with maxillary left central incisor
Localized chronic diffuse gingivitis
Generalized chronic papillary gingivitis
localized chronic diffuse gingivitis in the area of upper left maxillary teeth
Clinical features of gingivitis

Gingival Bleeding on Probing

- The two earliest symptoms of gingival inflammation preceding established gingivitis, are:
  1. Increased gingival crevicular fluid production rate
  2. Bleeding from the gingival sulcus on gentle probing

**BOP is of value for the early diagnosis and prevention of more advanced gingivitis**

1. Easily detectable clinically
2. BOP appears earlier than a change in color or other visual signs of inflammation
3. More objective sign that requires less subjective estimation by the examiner
Most common cause of BOP is **chronic inflammation**

- Bleeding is provoked by mechanical trauma
- Sites with BOP have a greater area of inflammation than sites that do not bleed
- The severity of the bleeding and the ease with which it is provoked depend on the intensity of the inflammation
- Should be checked 30 to 60 seconds after probing
Changes in the Surface Texture of the Gingiva

Changes in the Consistency of the Gingiva
Changes in Position of the Gingiva

Positions of the Gingiva & gingival recession

- Recession is exposure of the root surface by an apical shift in the position of the gingiva.
Histologically

- Junctional epi is usually present at CEJ or coronal to it
Apical migration of junctional epithelium
Presence of gingival inflammation **without** loss of attachment

**Gingivitis**

Presence of gingival inflammation **with** loss of attachment

**Periodontitis**
Actual and apparent positions of the gingiva

- **The actual position** is the level of the coronal end of the epithelial attachment on the tooth.
- **Apparent position** is the level of the crest of the gingival margin.
The severity of recession is determined by the actual position of the gingiva, not its apparent position.
1. Gingivitis Associated with Dental Plaque Only

2. Gingival Diseases Modified by Systemic Factors;
   - Endocrine changes
   - Blood dyscrasias

3. Gingival diseases modified by medications
   - Phenytoin
   - Cyclosporine
   - Calcium channel blockers

4. Gingival Diseases Modified by Malnutrition
   - Severe ascorbic acid (vitamin C) deficiency or scurvy
Poor diabetic control and length of time increase risk of periodontal breakdown and increase chances of poor response to therapy.
Non-Plaque-Induced Gingival Lesions

- Rare
- They are observed in lower socioeconomic groups, developing countries, and immunocompromised individuals
- Gingival Diseases of Specific Bacterial Origin
- Gingival Diseases of Viral Origin
- Gingival Diseases of Fungal Origin
- Gingival Diseases of Genetic Origin
- Foreign Body Reactions
Thank you