

## PERIODONTITIS

**Case Definition:** Periodontitis is the inflammation or the loss of supporting tooth structures namely the periodontal ligaments and alveolar bone resulting in gingival bleeding, foul odor, periodontal pockets and lastly mobility of the tooth.

### INCIDENCE OF THE CONDITION IN OUR COUNTRY

In India the prevalence of gingivitis is 80-90% and the incidence of chronic periodontitis is 21-28%. Prevalence of Chronic Periodontitis increases steadily with age from 35.7% for 30-39 yrs old to 89.2% for 80-90 yrs old. The average attachment level change or bone loss varies between 0.15mm to 0.19mm per year .It is commonly seen in age group of 30 yrs and above. Prevalence of Aggressive Periodontitis is below 1%. The average attachment level change or bone loss varies between 0.1mm to 1.0mm per year. Most frequently occurs in the period of puberty to 20 yrs.

Knowledge of the prevalence, extent and severity of periodontal disease within a population is modified by a wide range of concerns: epidemiological description of the distribution and patterns of disease, research interest related to the biological and environmental determinants of the disease. Knowledge of the distribution of the disease may reduce the direct and indirect economic cost of prevention and treatment programs and may assist in the development of efficient designs in clinical trials in periodontal disease.

### DIFFERENTIAL DIAGNOSIS

Essentially any condition having gum bleeding, pain or abscess. Important ones include:

- Acute gingival conditions.
- Peri apical abscess
- Periodontal abscess.

### DIAGNOSTIC CRITERIA, INVESTIGATIONS, TREATMENT & REFERRAL CRITERIA

#### LEVEL 1: AT SOLO PHYSICIAN CLINIC:

##### Clinical Diagnosis :

Generally asymptomatic cases or complains with either of following symptoms:-

- Bleeding from gums, slight to spontaneous, of prolonged duration
- Slight to moderately swollen gums
- Alteration in the color of gums ranging from pale red to magenta
- Occasional suppuration
- Difficulty in chewing
- Loosening of teeth, in advanced cases
- Spacing appearing between teeth.
- Dull pain radiating deep into the jaws
- History of occasional acute pain or swelling
- Pain on percussion on the involved tooth

##### Treatment

- Motivation and education of patient regarding oral hygiene measures
- Chlorohexidine mouthwash ( 5 ml ) twice daily for minimum 15 days
- Antibiotic therapy in case of acute pain or swelling
- Tab Ciprofloxacin 500mg and Tab Tinidazole 500mg 12 hourly for 5 days
- Advise patient to use interdental aids like dental floss and brushes

**Referral criteria**

- Persistent gingival inflammation for one week.
- Suppuration from the gums and halitosis
- Progressive loss of clinical attachment and spontaneous bleeding from the gums
- Increase in the mobility of teeth and spacing of teeth

**LEVEL 2: AT 6-10 BEDDED PRIMARY HEALTH CENTRE**

**Clinical Diagnosis :** Same as Level 1 for a fresh case reporting directly.

**Treatment:** Same as Level 1

**Referral criteria:** Same as Level 1

**LEVEL 3: AT 30-100 BEDDED COMMUNITY HEALTH CENTRE**

**Clinical Diagnosis :** Same as level 1

**Investigations:** Intra oral radiographs taken to assess the amount of bone loss and to see the underlying pathology.

**Treatment:** Same as Level 1

**Referral criteria:** Same as Level 1

**LEVEL 4: AT 100 OR MORE BEDDED DISTRICT HOSPITAL****Clinical Diagnosis**

- Same as level 1
- Dental charting which includes pocket depth ,clinical attachment loss, recession
- Check for bleeding on probing

**Investigations:**

- Intra oral periapical radiographs to check whether pulp is involved or not
- Vitality test of the tooth
- Orthopantomogram (OPG)
- Microbiological examination of the sub gingival flora using culture media.

**Treatment:**

- Motivation and education of the patient on oral hygiene
- Tab Ciprofloxacin 500mg and Tab Tinidazole 500mg 12 hourly for 5 days
- Scaling and root planing
- Periodontal surgery in the region of persistent inflammation of the gingiva and bone loss if seen on the radiographs after phase I therapy
- Review of case at interval of 1, 3, 6 months
- More frequent review for aggressive case at 3 months interval and antibiotic therapy consisting of Tab Ciprofloxacin and Tab Tindazole to be given for 14 days

**SUGGESTED READING**

1. Micheal G Newman, Henry H Takei, Perry R Klokkevold, Editors: Text Book of Clinical Periodontology, 10th Edition Saunders, Elsevier 2006.
2. Jan Lindhe ,Thorkild Karring, Nicholas P Lang Editors : Text Book of Clinical Periodontology and Implant dentistry ,4th Edition Blackwell Munksgaurd 2003