

EXAMINATION OF PATIENT WITH PERIODONTAL DISEASE DONE

Lecture 1

First visit

- **1)MEDICAL HISTORY**
- The health history can be obtained
- **verbally** by questioning the patient and recording his or her responses on a blank piece of paper or
- by means of a **printed questionnaire** that the patient completes

THE MEDICAL HISTORY SHOULD INCLUDE REFERENCE TO THE FOLLOWING

- The patient is under the care of a physician: (nature , duration ,therapy)
- hospitalizations and operations
- Medications
- Medical problems
- Abnormal bleeding tendencies
- Allergy
- Information is needed regarding the onset of puberty and for females, menopause, menstrual disorders, pregnancies, and miscarriages.
- Family medical history

WHAT IS THE RELEVANCE OF A PATIENT'S MEDICAL HISTORY TO HIS OR HER PERIODONTAL CARE?

- Medical problems can increase susceptibility to periodontal diseases (e.g., diabetes and HIV).
- Medical problems can have periodontal and other oral manifestations (e.g., leukaemia and mucocutaneous disorders).
- Prescribed and nonprescribed medications can have oral and periodontal side effects
- precautions to be taken to avoid complications during or after treatment (e.g., antibiotic prophylaxis and patients on certain medications such as anticoagulants).
- Treating certain conditions may present additional risk to the dental team

2)Dental History

1. Visits to the dentist
2. The patient's oral hygiene regimen
3. orthodontic treatment
4. patient is experiencing pain in the teeth or in the gingiva
5. the presence of any gingival bleeding
6. bad taste
7. difficulty chewing
8. Habits
9. previous periodontal problems
10. any removable prosthesis
11. Does the patient have implants

3)social history

- details of habits such as tobacco use, including smokeless tobacco., and alcohol consumption.



- occupation

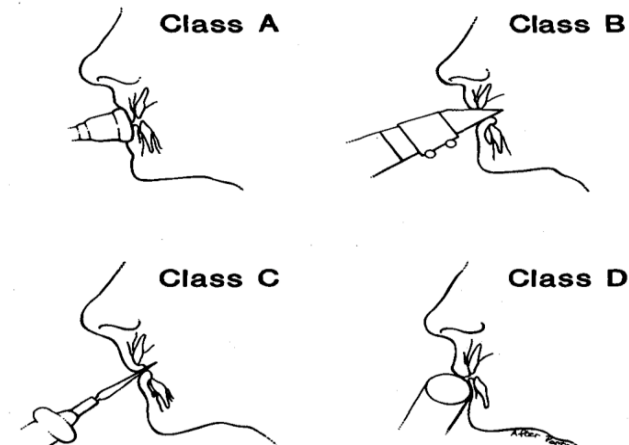


Fig. 2. The embouchure in each class of wind instrument



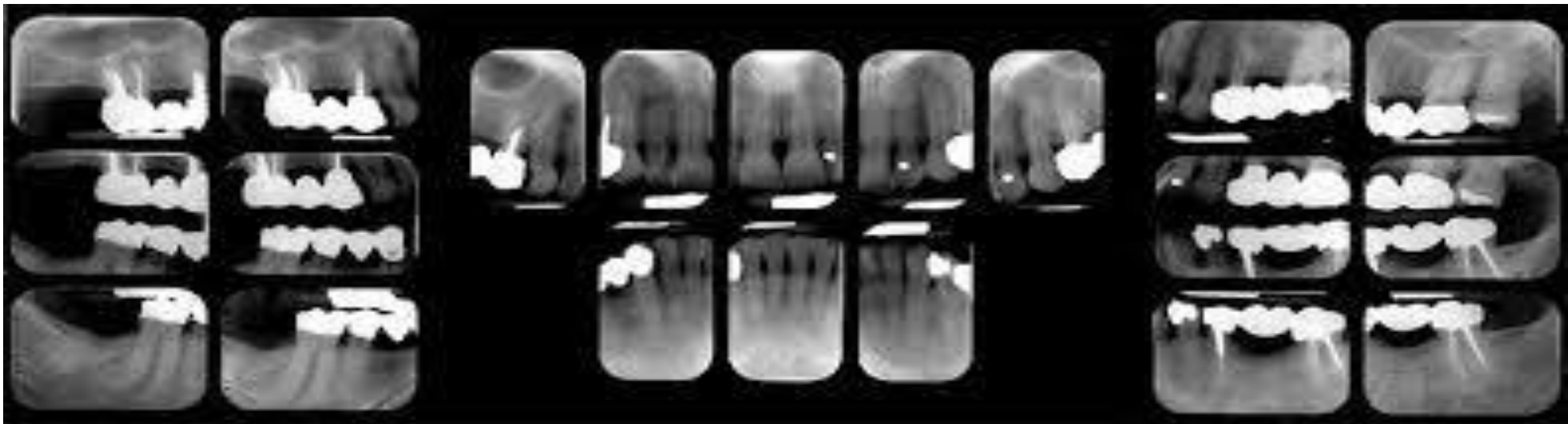
4) Casts

- 1) position of the gingival margins (recession).
- 2) position and inclination of the teeth.
- 3) The proximal contact relationships
- 4) The food impaction areas.
- 5) a view of the lingual–cuspal relationships.
- 6) Casts are important records of the dentition before it is altered by treatment.
- 7) visual aids during discussions with the patient
- 8) pretreatment and posttreatment comparisons
- 9) determine the position of implant placement if the case will require it.

5) Intraoral Radiographic Survey

- The radiographic survey should consist of:
- 14 intraoral films
- 4 posterior bite-wing films

7-6	5-4	3	2-1-1-2	3	4-5	6-7
7-6	5-4	3	2-1-1-2	3	4-5	6-7



- **Panoramic radiographs**



6) Clinical Photographs



Oral Examination



Oral Hygiene









Disclosing solution



Oral Malodor



Examination of the Oral Cavity

- Lips
- floor of the mouth
- tongue
- Palate
- oropharyngeal region
- quality and quantity of saliva.
- findings may not be related to the periodontal problem

Examination of the Lymph Nodes.



Lymph nodes can become enlarged as a result of

- infectious episode
- malignant metastases
- residual fibrotic changes

In periodontics

- Primary herpetic gingivostomatitis
- necrotizing ulcerative gingivitis
- acute periodontal abscesses



Examination of the Teeth

- Caries
- poor restorations
- developmental defects
- anomalies of tooth form
- Wasting
- Hypersensitivity
- proximal contact relationships.

Examination of the implants

- Stability
- Position
- number of implants
- relationship to the adjacent natural dentition .

Wasting Disease of the Teeth

- Any gradual loss of tooth substance, which is characterized by smooth, polished surfaces.

Erosion

- wedge-shaped depression in the cervical area of the facial tooth surface



Abrasion

- saucer-shaped or wedge-shaped indentations
- Abrasion starts on the exposed cementum surfaces rather than on the enamel



Abrasion of the incisal edges

- Habits such as holding objects (e.g., bobby pins, tacks) between the teeth.



Attrition (facets)

- When active tooth grinding occurs, the enamel rods are fractured and become highly reflective to light
- If dentin is exposed, a yellowish brown discoloration is frequently present



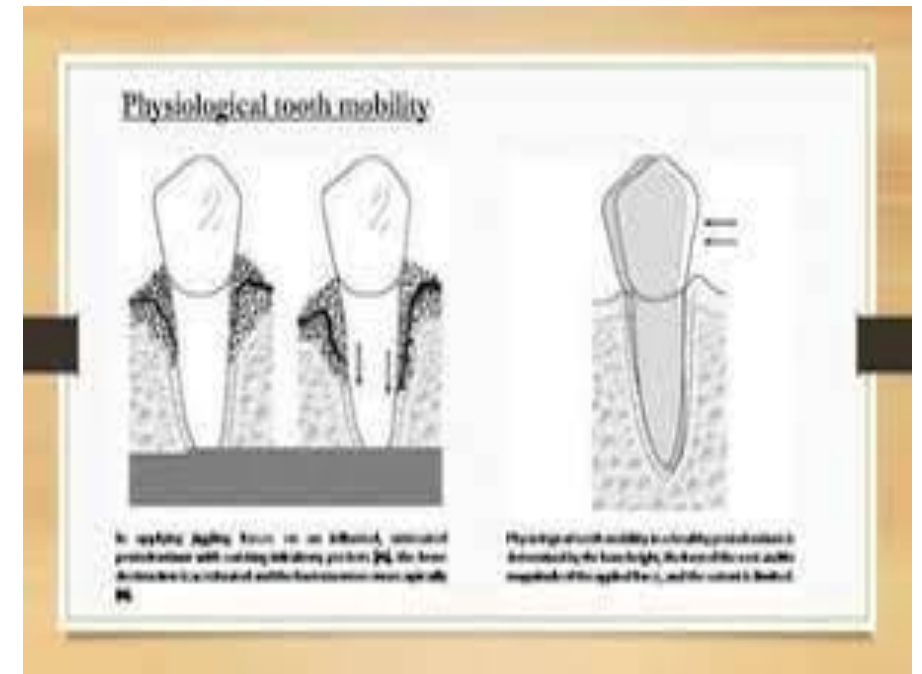
Hypersensitivity.

- Root surfaces exposed by gingival recession may be hypersensitive to:
- thermal changes
- tactile stimulation.



Tooth Mobility

- All teeth have a slight degree of physiologic mobility, which varies for different teeth and at different times of the day.



Causes of pathological teeth mobility:

- 1-Loss of tooth support (bone loss)



- **The amount of mobility depends on:**

1. the severity of bone loss
2. distribution of bone loss
3. the length of the roots
4. shape of the roots
5. root size.

- **2- Trauma from occlusion**
- bruxism and clenching) is a common cause of tooth mobility

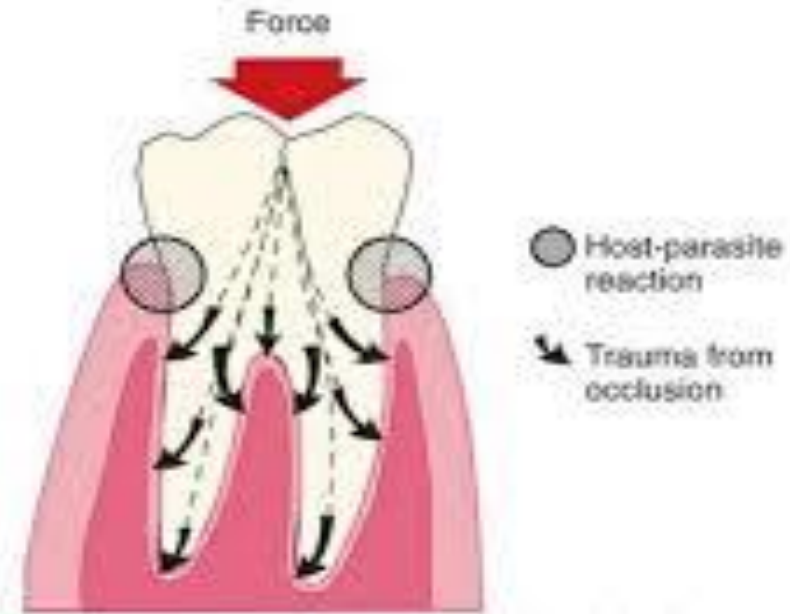
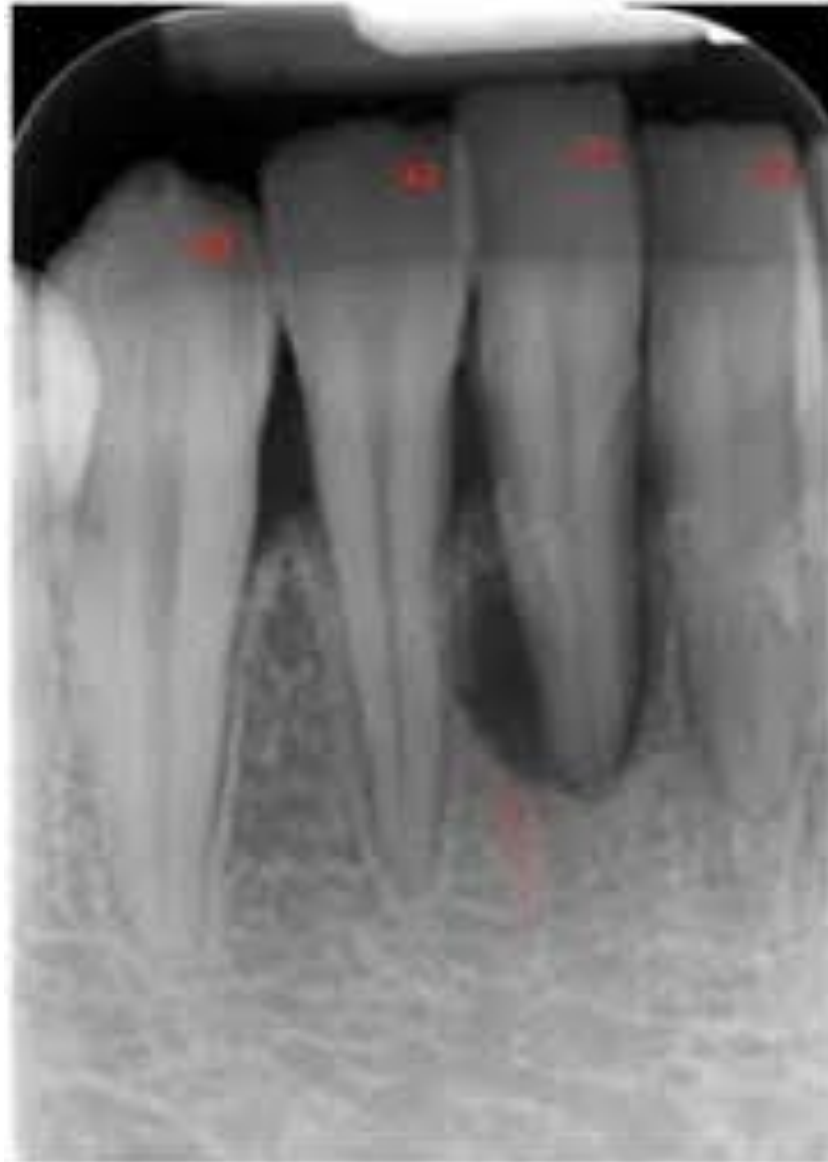


FIG. 25.9 The reaction between dental plaque and the host takes place in the gingival sulcus region. Trauma from occlusion appears in the tissues that are supporting the tooth.

- 3- Extension of inflammation from the gingiva or from the periapex into the periodontal ligament



- **4-Tooth mobility is increased during pregnancy, and it is sometimes associated with the menstrual cycle or the use of hormonal contraceptives.**



- 5- Periodontal surgery temporarily increases tooth mobility immediately



- 6- Pathologic processes of the jaws



Fig. 1: Digital Panoramic Radiograph Reveals Triangular Radiolucent Area Involving Roots of Mandibular Right First and Second Premolar

Trauma from Occlusion

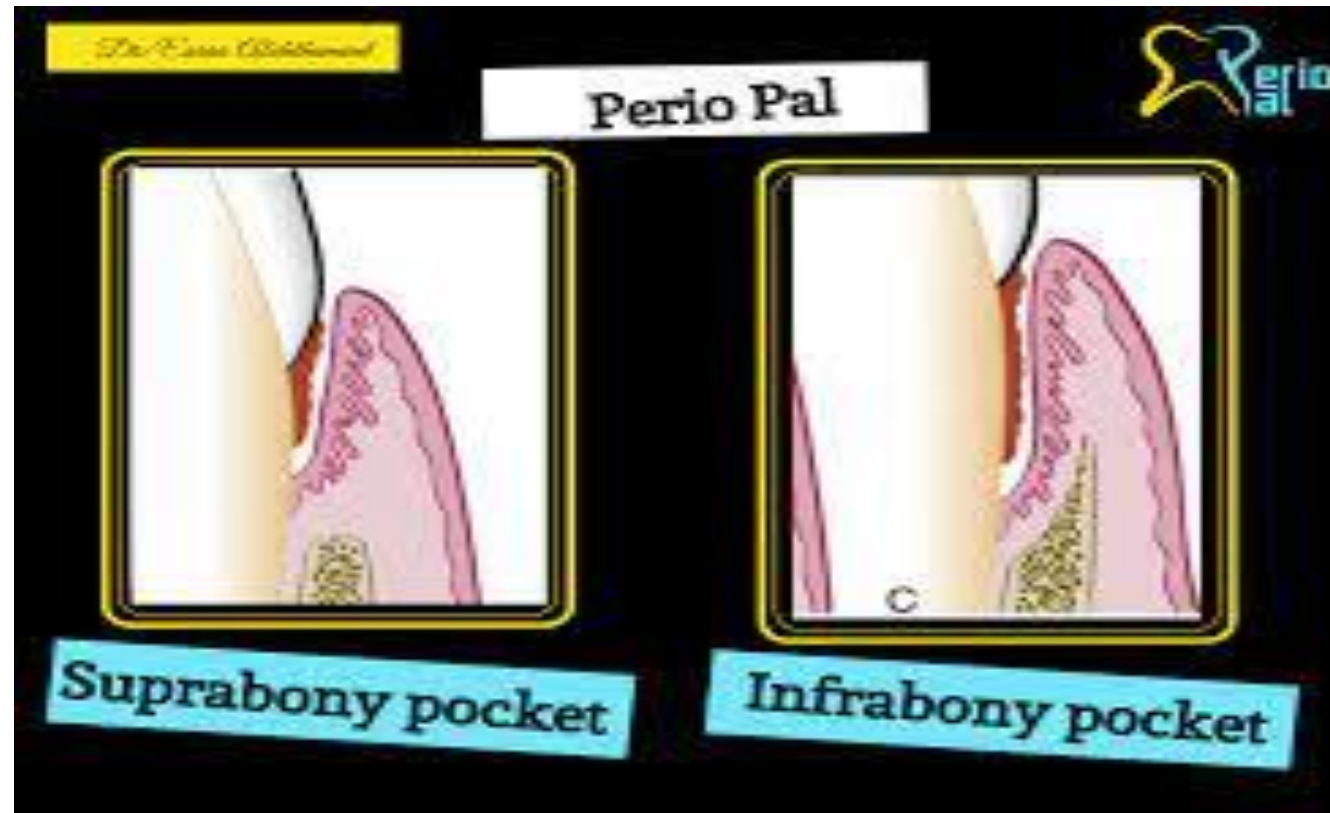
- Trauma from occlusion refers to tissue injury produced by occlusal forces.

Periodontal findings that suggest the presence of trauma from occlusion

- 1- excessive tooth mobility
- 2- widened periodontal space
- 3- vertical or angular bone destruction



- 4- infrabony pockets



- 5- pathologic migration, especially of the anterior teeth.



Pathologic Migration of the Teeth

- Alterations in tooth position under abnormal forces

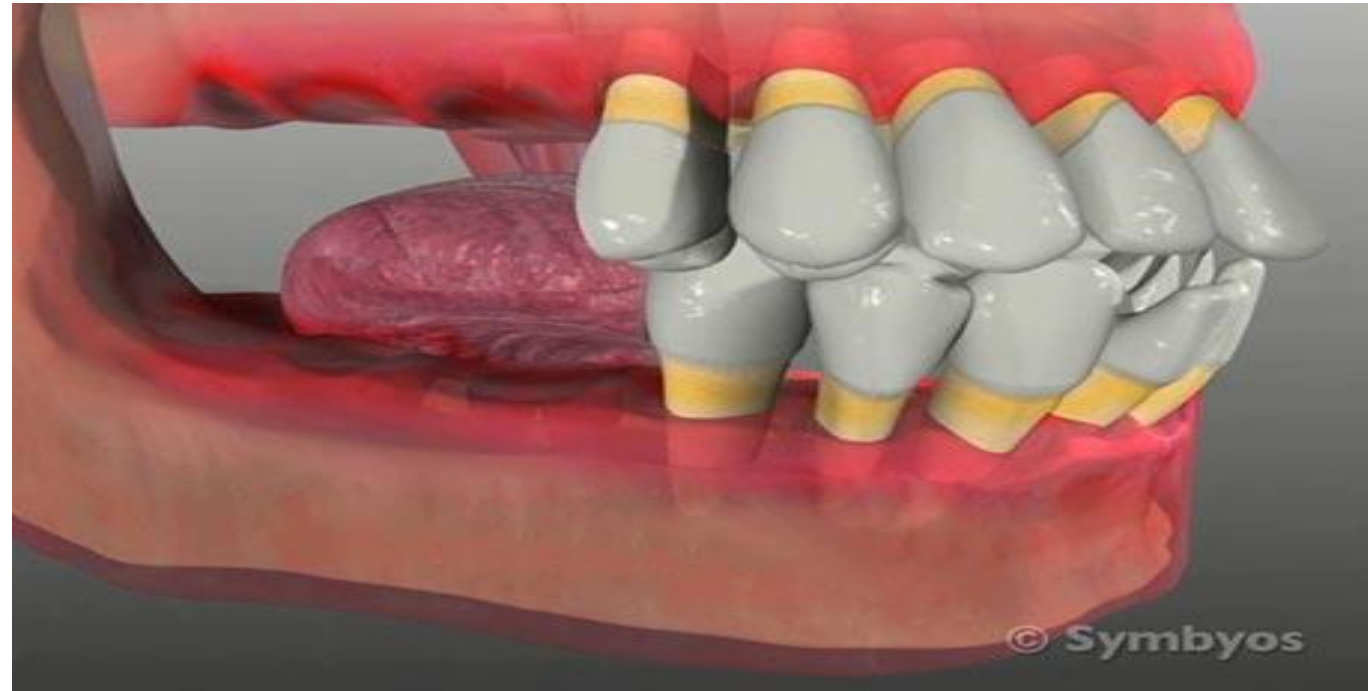


- tongue-thrusting habit
may be a contributing
factor



Premature tooth contacts in the •
posterior region that deflect the
mandible anteriorly contribute to
the destruction of the periodontium
of the maxillary anterior teeth and
leads to pathologic migration.

- The loss of posterior teeth can lead to the facial “flaring” of the maxillary anterior dentition.



- Pathologic migration of the anterior teeth in young persons may be a sign of localized aggressive (juvenile) periodontitis



Sensitivity to Percussion.

- is a feature of **acute** inflammation of the periodontal ligament.



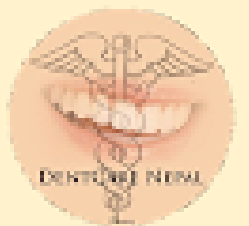
Initial clinical sign of juvenile periodontitis:

A. Pathological tooth migration and midline diastema

B. Tooth mobility and bone loss

C. Gingival enlargement and pus formation

D. Pain and bleeding



Examination of the Periodontium

- The presence of supragingival plaque and calculus can be directly observed
- the amount can be measured with a calibrated probe.



Detection of subgingival calculus

- Use no. 17 explorer







Gingiva

- The gingiva must be dried



Features of the gingiva

- Color
- size
- contour
- consistency (friable and soft)
- position
- ease of bleeding
- pain.

Tissue response in gingival inflammation

- 1-Edematous

- Smooth
- glossy
- soft
- red



- 2- fibrotic

- Firm
- Stippled
- Opaque
- Thicker
- Round margin



Periodontal Pockets

1. presence
2. distribution on each tooth surface
3. the pocket depth
4. the level of attachment on the root
5. type of pocket



Signs and Symptoms of pockets

- **probing**

is the only reliable
method of
detecting pockets



Clinical signs

- 1-color changes



- 2-rolled” edge separating the gingival margin from the tooth surface



- 3- enlarged edematous gingiva



- 4- bleeding



- 5-suppuration



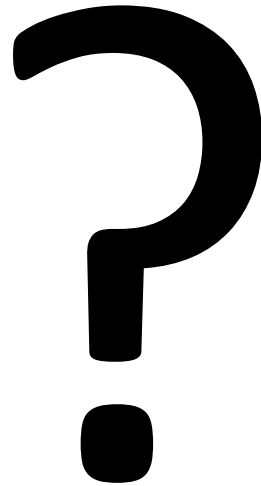
Symptoms

- generally painless

- 1- localized or sometimes radiating pain
- 2- the sensation of pressure after eating that gradually diminishes
- 3- foul taste in localized areas
- 4- sensitivity to hot and cold
- 5- toothache in the absence of caries

Detection of Pockets

- The only accurate method of detecting and measuring periodontal pockets is by



- Pockets can be detected by radiographic examination

True

Or

False

Note: Gutta Percha points or calibrated silver points can be used with radiograph to assist in determining the level of attachment of periodontal pocket.

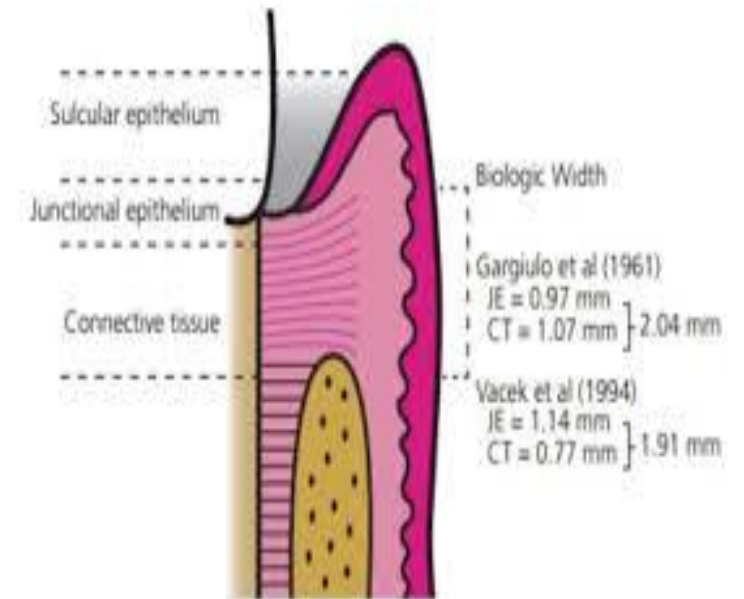
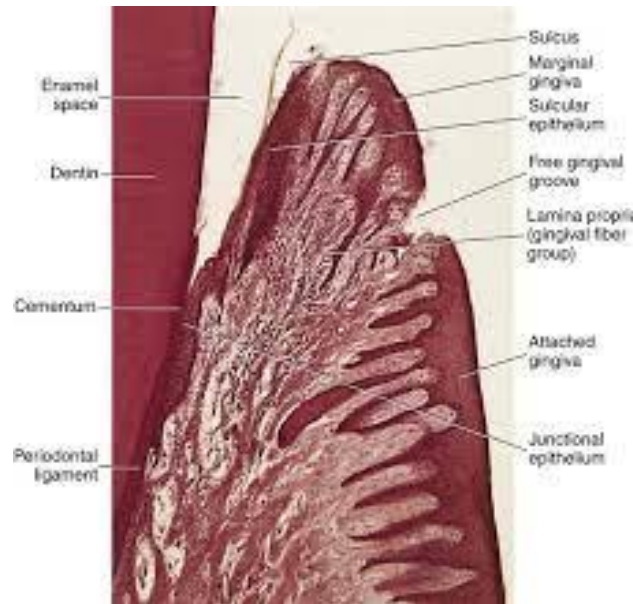


Pocket Probing

- **There are two different pocket depths:**
- (1) the biologic or histologic depth
- (2) the clinical or probing depth

The biologic or histologic depth

- the distance between the gingival margin and the base of the pocket



2. the clinical or probing depth

- is the distance to which a probe penetrates into the pocket.



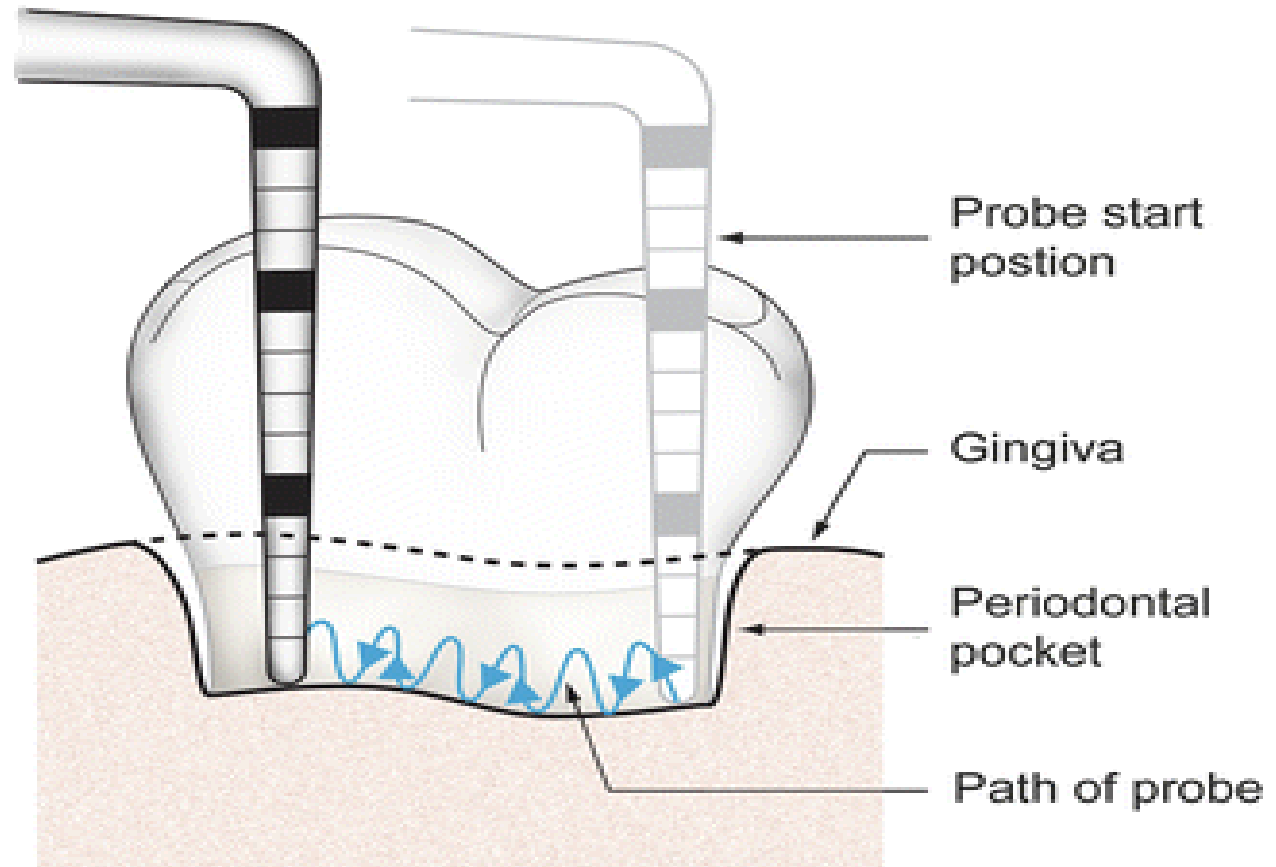
Probe penetration can vary, depending on:

1. force of introduction
2. the shape and size of the probe
3. the direction of penetration
4. the resistance of the tissues
5. the convexity of the crown
6. the degree of tissue inflammation.

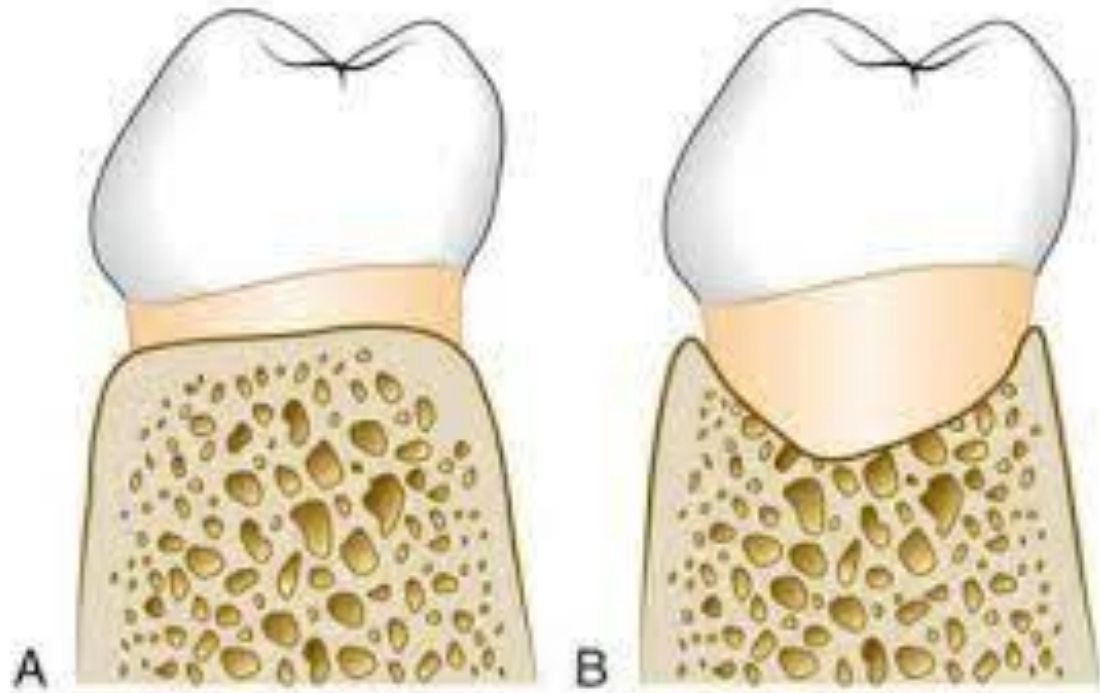
0.75 N

Probing Technique

- Parallel
- “walked”
circumferentially



Detection of the interdental crater



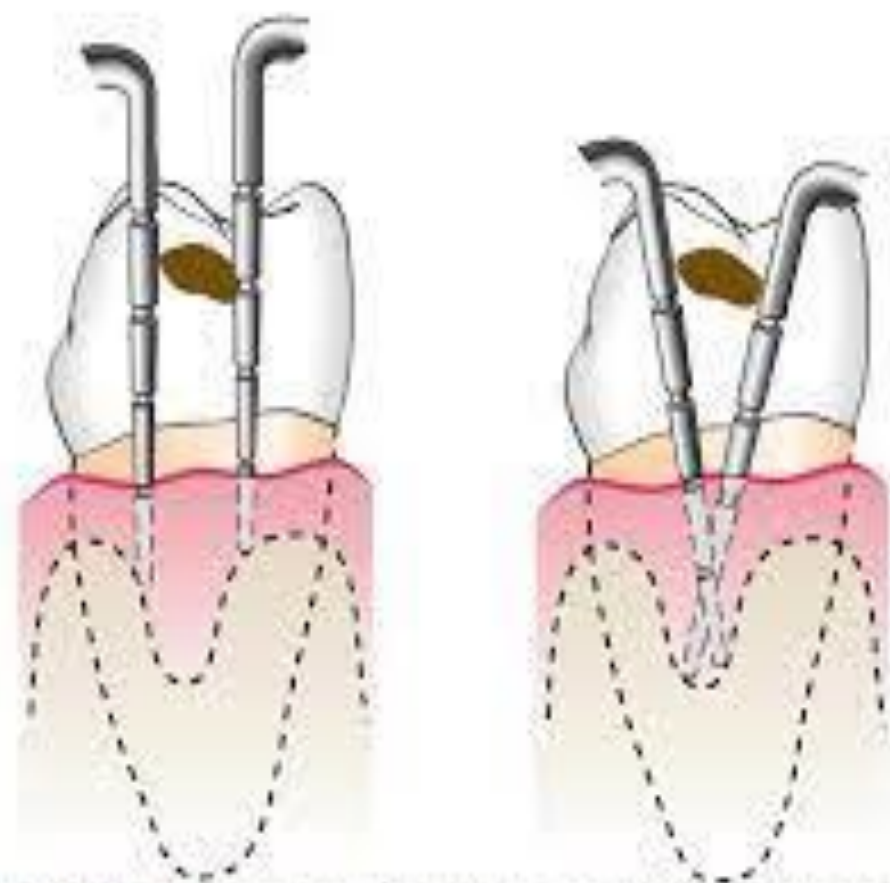


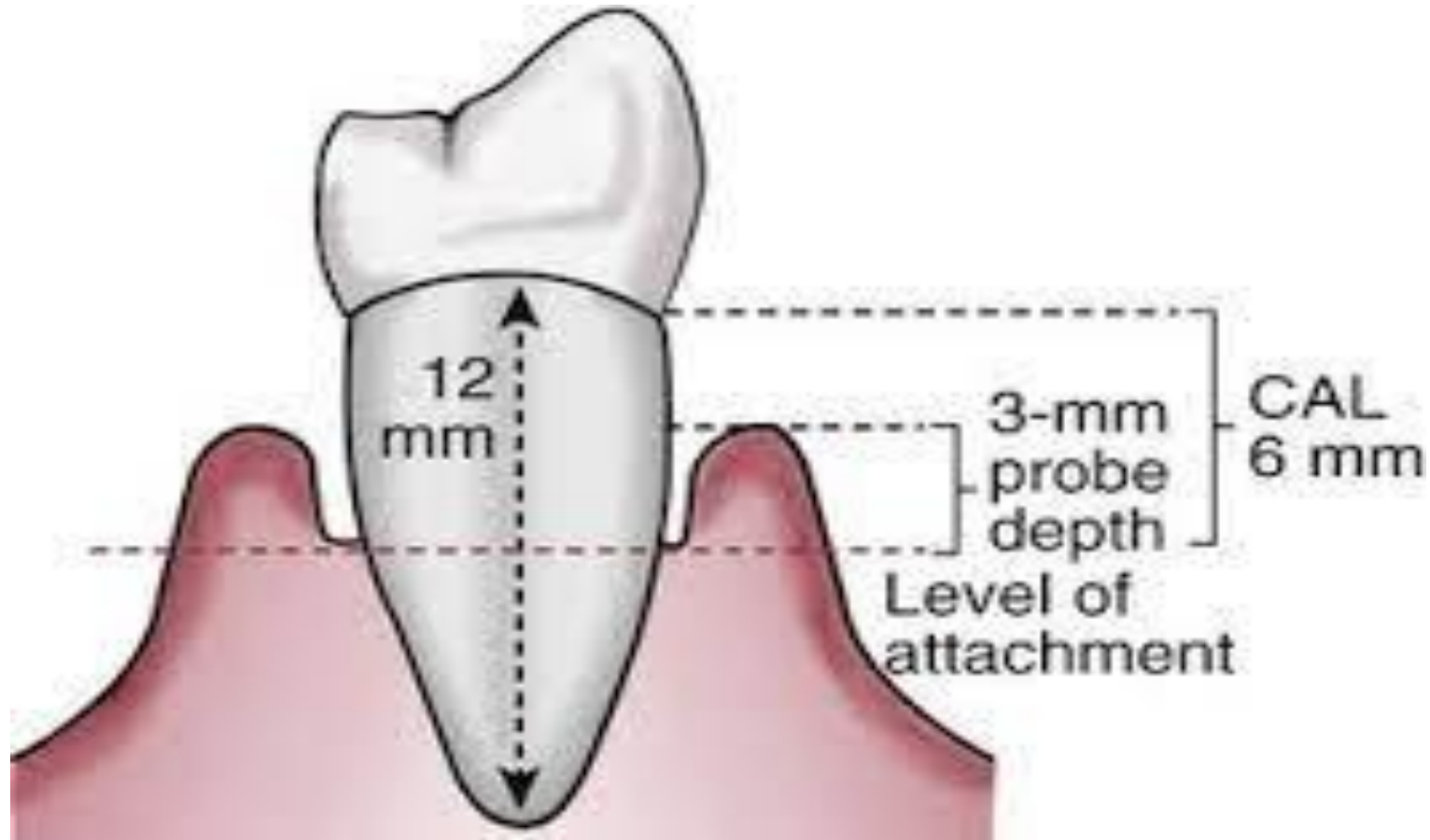
Figure 29-17 Vertical insertion of the probe (*left*) may not detect interdental craters, oblique positioning of the probe (*right*) reaches the depth of the crater.

Furcation involvement



Level of Attachment Versus Pocket Depth.

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Determining the Level of Attachment.

- Gingival contour refers to the thickness and shape of the margins of the gingiva to the crown of the tooth. Ideal gingival contour is characterized by sharp interdental papillae and equally tapered gingival margins at the cervical margin of the teeth
- Normal gingiva covers the alveolar bone and tooth root to a level just coronal to the cement-enamel junction. At the dentogingival junction, the marginal, or unattached, gingiva is the terminal edge of the gingiva, surrounding the teeth in a collar-like fashion