

PERIODONTAL POCKET



Introduction:

In dental anatomy, gingival and periodontal pockets (colloquially referred to as periodontal pockets) are dental terms that denote the presence of abnormal depth of gingival sulcus near the point where gingival (gum) tissue contacts the teeth.

The periodontal pocket is a key clinical feature in periodontal disease and is defined as a pathologically deepened gingival sulcus around a tooth at the gingival margin. It represents the space between the tooth surface and the detached gingiva due to periodontal tissue destruction (1).

Classification:

1- Gingival Pocket (Pseudo-pocket): (Figure 2) also known as false pockets, arise due to gingival enlargement without the loss of connective tissue attachment or apical migration of the junctional epithelium. This enlargement can result from factors such as gingival hyperplasia, edema, certain medications, or hormonal changes. In pseudopockets, the gingival margin moves coronally, creating the appearance of a deeper pocket, but without the underlying periodontal tissue destruction characteristic of true periodontal pockets, related to gingivitis

2- Periodontal Pocket (True-pocket): (Figure 3) In contrast to pseudopockets, periodontal pockets involve inflammation and destruction of the supporting periodontal tissues, including the detachment of junctional epithelial cells and alveolar bone loss due to osteoclastic resorption, related to periodontitis (1).

Clinical Relevance:

Accurate diagnosis and classification of periodontal pockets are critical for effective treatment planning. Common methods of assessment include:

Periodontal Probing: Measures the depth of the pocket.

Radiographic Analysis: Evaluates bone levels and the extent of destruction (2).

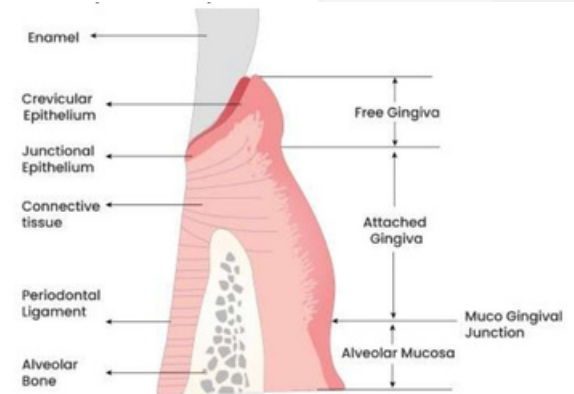


Figure 1 : Anatomy gingiva

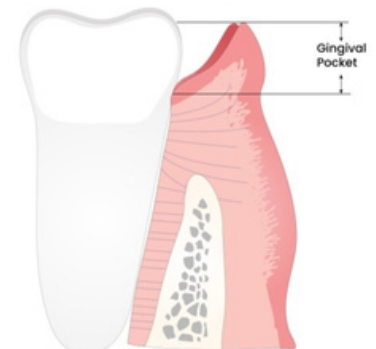


Figure 2 : gingival pocket

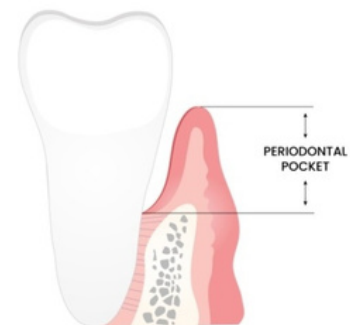
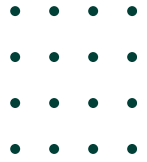


Figure 3 : Periodontal pocket

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What Causes Gum Pockets?

Gum pockets are usually caused by poor oral hygiene, leading to plaque buildup that contains harmful bacteria, which irritate and inflame the gums, making them prone to infection. If left untreated, deep pockets form between the teeth and gums, allowing bacteria to accumulate and worsen the damage. Genetic factors or certain medical conditions, such as diabetes, can increase the risk of gum pockets. Aging and a weakened immune system can also contribute to the problem. Identifying the root cause is essential for developing an effective treatment plan (3).

WHAT'S THE TREATMENT FOR GUM POCKETS?

The treatment of gum pockets depends on the size of the pockets and the extent of lost gum and bone tissue.

1-SCALING & ROOT PLANING

If the pocket suitable for mild to moderate cases.

Involves removing tartar and plaque and smoothing the roots to promote healthy gum reattachment.

2-GUM DISEASE POCKET REDUCTION SURGERY

Recommended for cases with bone loss.

The procedure includes folding back the gums to clean plaque and tartar from the roots and reshaping the gums to reduce pocket depth, preventing further damage.

3-TISSUE SUPPLEMENTAL PROCEDURES

Required for severe cases with significant gum or bone loss that causes tooth mobility.

Includes bone and gum grafting to provide sufficient support for the teeth (2).



Figure 4: Before and after scaling and root planing

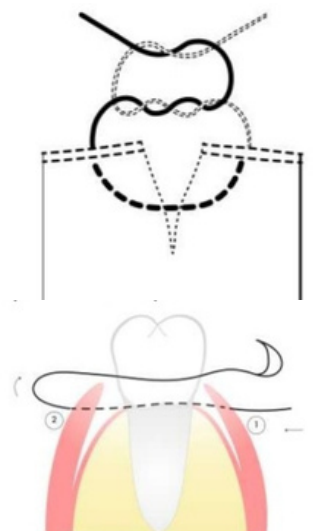


Figure 5: A visual representation of gingival surgical

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