

# The surgical phase of therapy

## Phase II Periodontal Therapy

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### Gingival Surgery:

#### Gingivectomy:

The word gingivectomy means “excision of the gingiva.

#### Objective

- Removing the pocket wall, gingivectomy provides visibility and accessibility for complete calculus removal and thoroughly smoothing of the roots.
- Creating a favorable environment for gingival healing and restoration of a physiologic gingival contour.

**before**



**after**



**Gingivectomy may be performed for the following indications:**

1. Elimination of suprabony pockets if the pocket wall is fibrous and firm
2. Elimination of gingival enlargements

**Contraindications to gingivectomy include the following:**

1. Access to bone required
2. Narrow zone of keratinized tissue
3. Aesthetics
4. Patients with high postoperative risk of bleeding

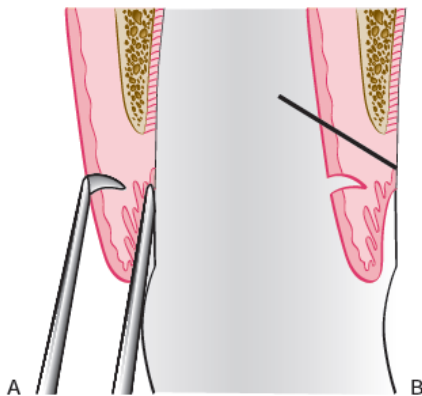
**The step-by-step technique for gingivectomy is as follows:**

**Step -1** after anesthetizing the area indicated for surgery, the pockets on each surface are explored with a periodontal probe & marked with a pocket marker .

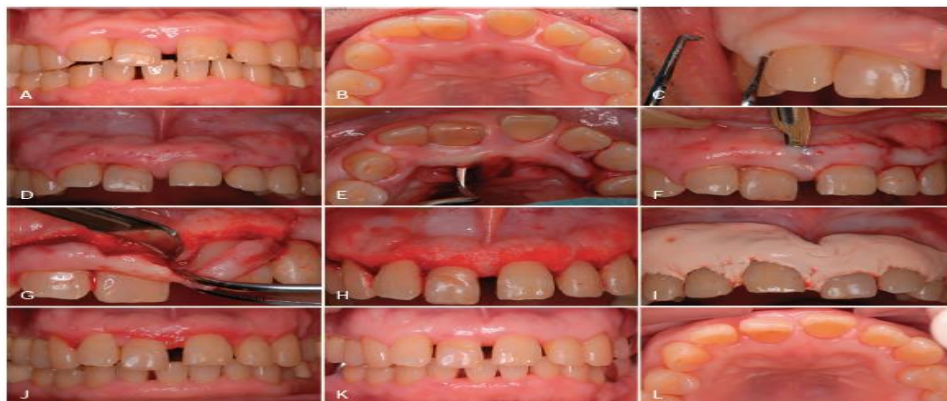
**Step 2:** Periodontal knives (e.g., Kirkland) are used for incisions on the facial and lingual surfaces. Orban periodontal knives are used for interdental incisions . blades (#12 and #15), and scissors are used as auxiliary instruments. The external bevel incision is started apical to the points marking the course of the pockets, and it is directed coronally to a point between the base of the pocket and the crest of the bone. It. Exposure of bone is undesirable. If this occurs, healing usually presents minimal complications if the area is adequately covered by the surgical dressing.. The incision should be beveled at approximately 45 degrees to the tooth surface, and it should re-create the normal festooned pattern of the gingiva. Failure to bevel the incision will leave a broad, fibrous plateau that will delay development of a physiologic contour.

**Step 3:** Remove the excised pocket wall, irrigate the area, and examine the root surface.

**Step 4:** Scale and root plane. **Step 5:** Cover the area with a surgical dressing.



**Figure 56-7** Marking the depth of a suprabony pocket. A, A pocket marker in position. B, The beveled incision extends apical to the perforation made by the pocket marker.



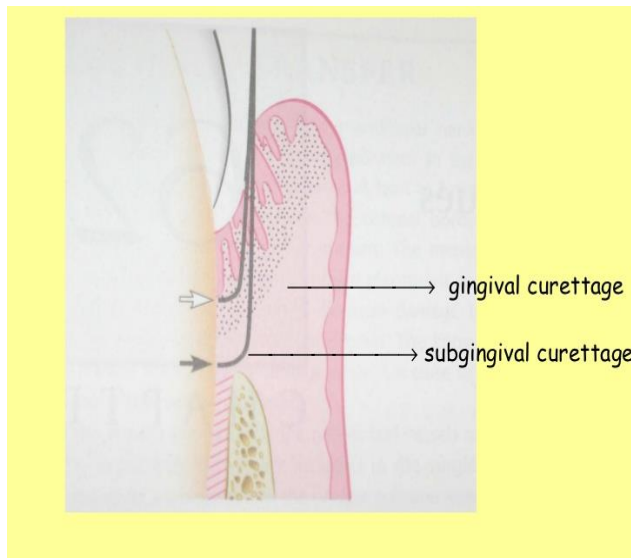
**Figure 56-5** Results obtained by treating a suprabony pocket with gingivectomy. A and B, Preoperative facial and palatal views. C, Marking of the depth of the suprabony pocket. D, The bottoms of the pockets are indicated by pinpoint markings. E, A beveled palatal incision with an Orban knife. F, A facial beveled incision with a Bard-Parker no. 15 blade extends apical to the perforations made by the pocket marker. Note that the beveled incision can also be made with a Kirkland knife. G, The interdental incision and excision of the pocket wall with a Bard-Parker no. 12 blade. H, A completed gingivectomy. I, The surgical site covered with periodontal dressing. J, One week after healing. K and L, Results 22 months after the operation.

## Gingival Curettage

The word curettage is used in periodontics to describe the scraping of the gingival wall of a periodontal pocket to remove the chronically inflamed tissue. The excisional new attachment procedure is a

definitive subgingival curettage procedure that is performed with a knife.

However, when the root is thoroughly scaled and planed, and the biofilm and calculus are removed, the inflammation in the tissue automatically resolves without tissue curettage.



## INDICATIONS

- Curettage can be performed as a part of new attachment attempts in shallow to moderate infra bony pockets.
- Non-definitive procedure to reduce inflammation prior to pocket elimination using other methods
- In patients in whom aggressive surgical procedure (e.g. Flaps) are contraindicated owing to age, systemic and psychology problems. Frequently performed on recall visits as a method of maintenance treatment for areas of recurrent inflammation and pocket depth

➤ **Basic technique:**

- Curettage does not eliminate the causes of inflammation (i.e. Bacterial plaque and deposits) therefore, it should always be preceded by scaling & root planning, which is the basic periodontal therapy procedure.
- Gingival curettage always requires some type of local anesthesia.
- A curette is selected so that the cutting edge will be against the tissue.
- The instrument is inserted so as to engage the inner lining of the pocket wall and is carried along the soft tissue, usually in a horizontal stroke.
- In sub gingival curettage the tissues attached between the bottom of the pocket & the alveolar crest are removed with a scooping motion of the curette to the tooth surface. The area is flushed to remove debris & the tissue is partly adapted to the tooth.

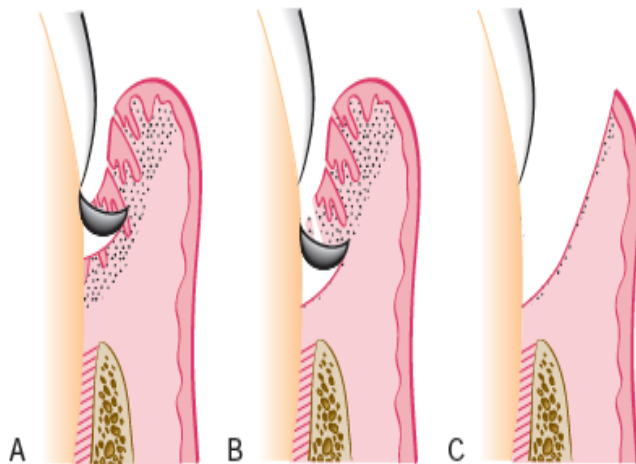
**Therefore, the use of curettage to eliminate the inflamed granulation tissue is unnecessary.???**

It has been shown that scaling and root planing with additional curettage do not improve the condition of the periodontal tissues beyond the improvement that results from scaling and root planing alone.

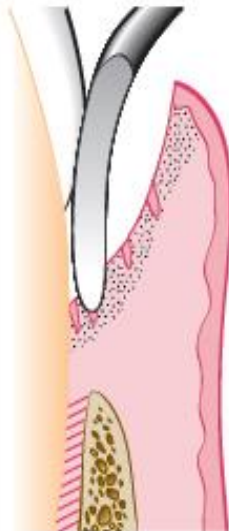
This should not be confused with the elimination of granulation tissue during flap surgery. The reason for the latter is to remove the bleeding tissue that obstructs visualization and prevents the necessary examination of the root surface and the bone. Thus, the removal of granulation tissue during surgery is accomplished for technical rather than biologic reasons.

**In the anterior maxilla, gingival curettage and root planing apical to the base of the periodontal pocket should be avoided.???**

The removal of the junctional epithelium and the disruption of the connective tissue attachment expose non diseased cementum. Root planning and the removal of non diseased cementum may result in attachment loss and gingival recession.



**Figure 56-3** Subgingival curettage. A, Elimination of pocket lining. B, Elimination of junctional epithelium and granulation tissue. C, Procedure completed.



**Figure 56-2** Gingival curettage performed with a horizontal stroke of the curette.

## Gingivoplasty

Gingivoplasty is recontouring the gingiva in the absence of pockets. It may be accomplished with a periodontal knife, a scalpel, or rotary coarse diamond stones.

- Successful periodontal therapy is based on total elimination of plaque calculus and diseased cementum from tooth and root surface.
- Whenever there is a pocket present ,plaque control becomes difficult and more deeper the pocket more difficult the access because the surface area to be scaled is increased.

