

## Contemporary Techniques in Surgical Endodontics

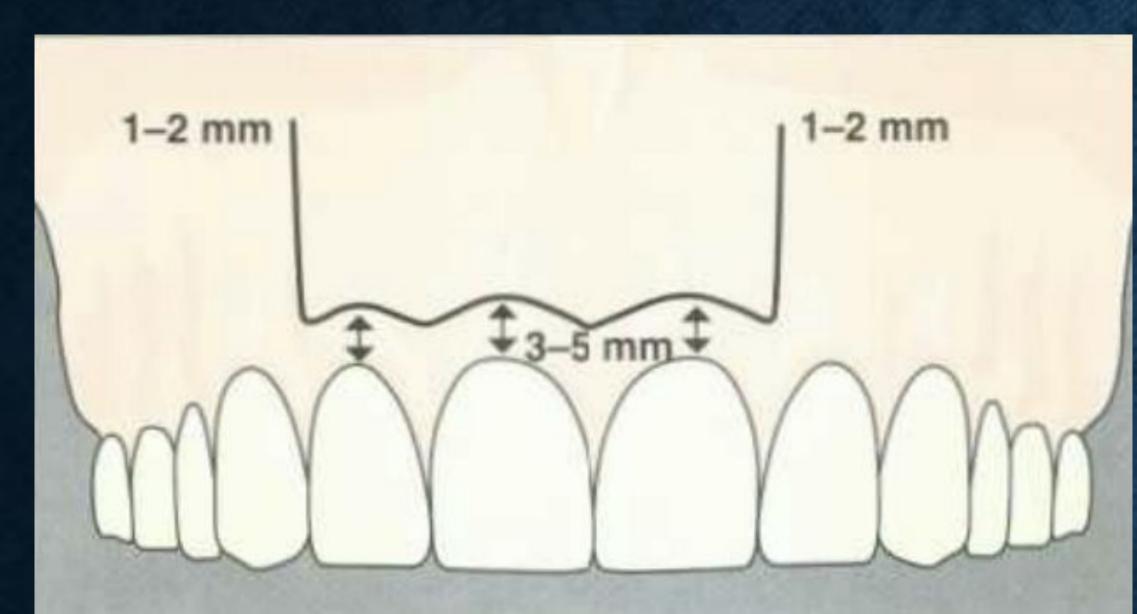
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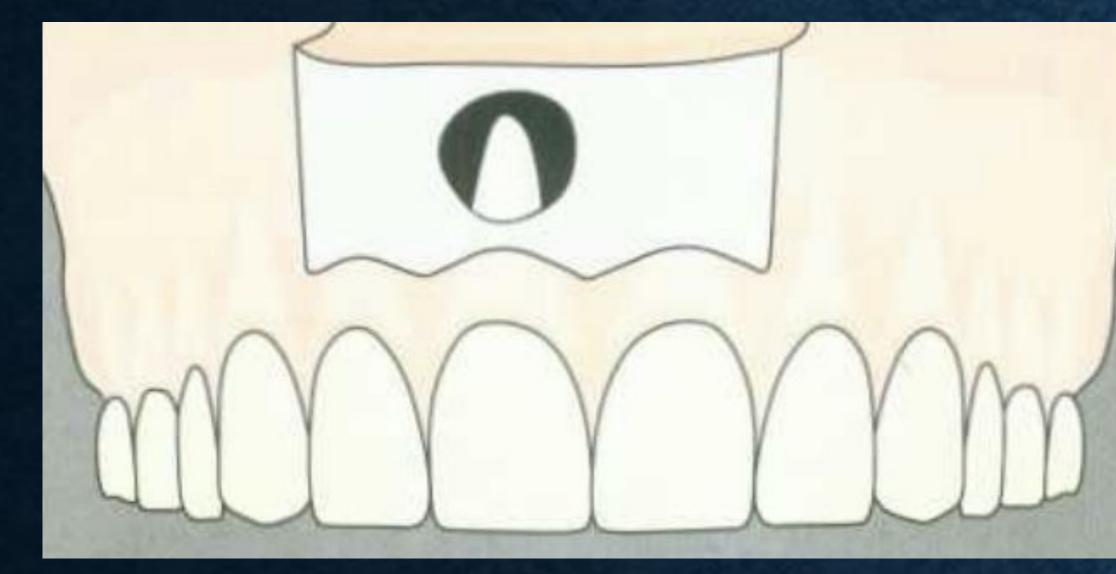
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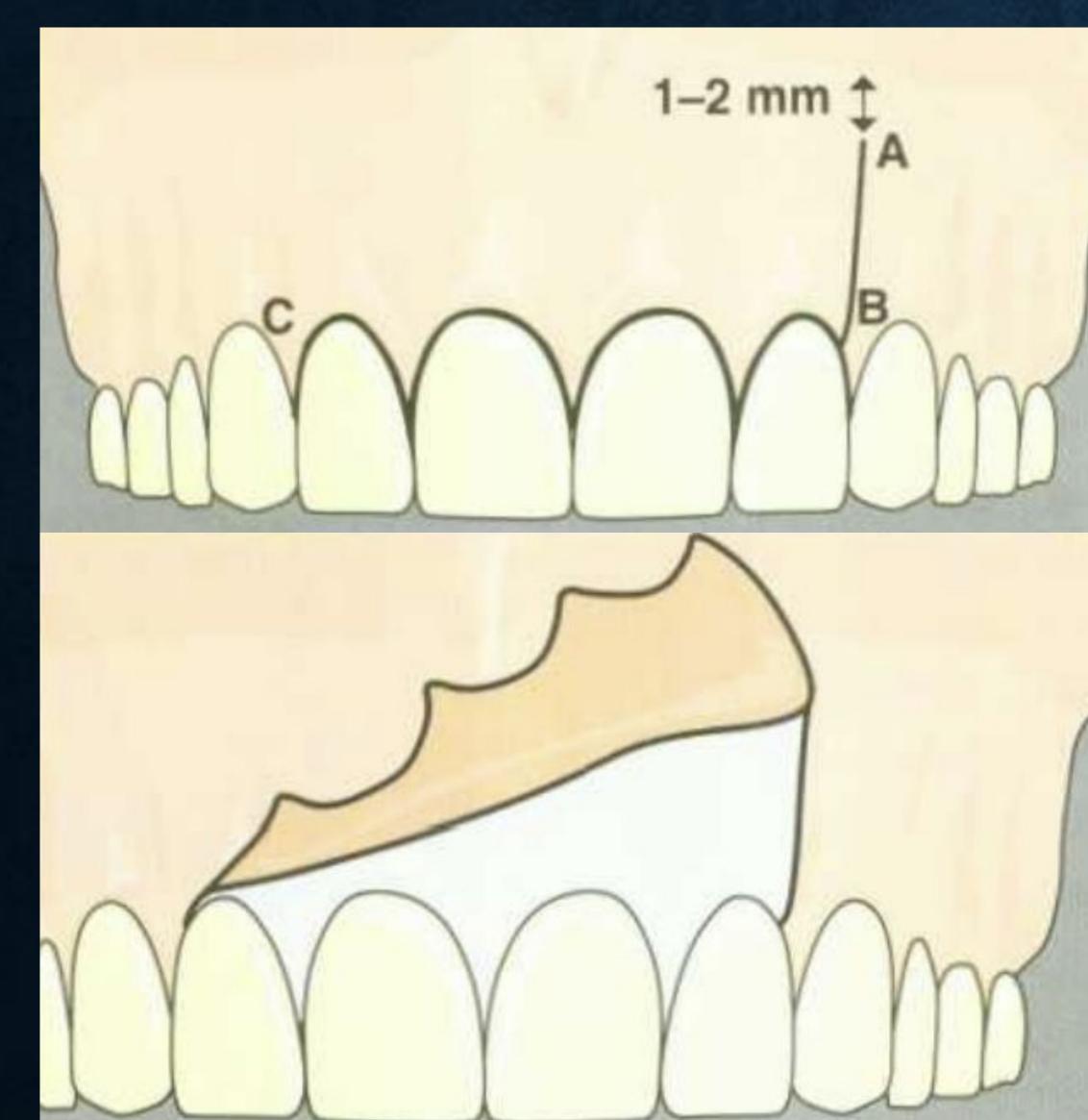
## Flap Design

Ochsenbein-Luebke





### Intrasulcular Flap



Arens, Donald E. Practical Lessons in endodontic surgery/ Donald E. Arens; in collaboration with Mahmoud Torabinejad, Noah Chivian, Richard Rubinstein 1998

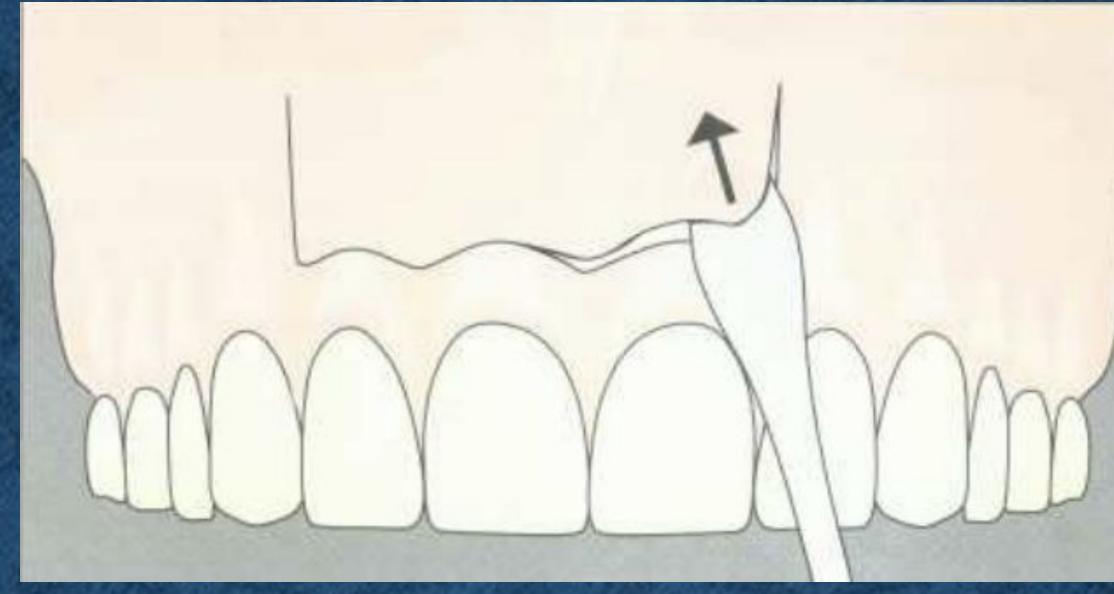
#### Advantages

- The flap is simple to incise and reflect
- The surgical site is readily visualized
- Access to the apex of the involved tooth is good
- The marginal gingiva is not disturbed, which greatly reduces the potential for gingival recession.
- Advantageous in presence of prothetic crowns
- Existing
   nonpathologic
   dehiscences are
   avoided because the
   gingival attachement
   is not disturbed
- Minimal effort is required to retract the flap
- Because the incison has good reference points, the flap is easily repositioned
- The patient is able to maintain good oral hygiene during the healing period.

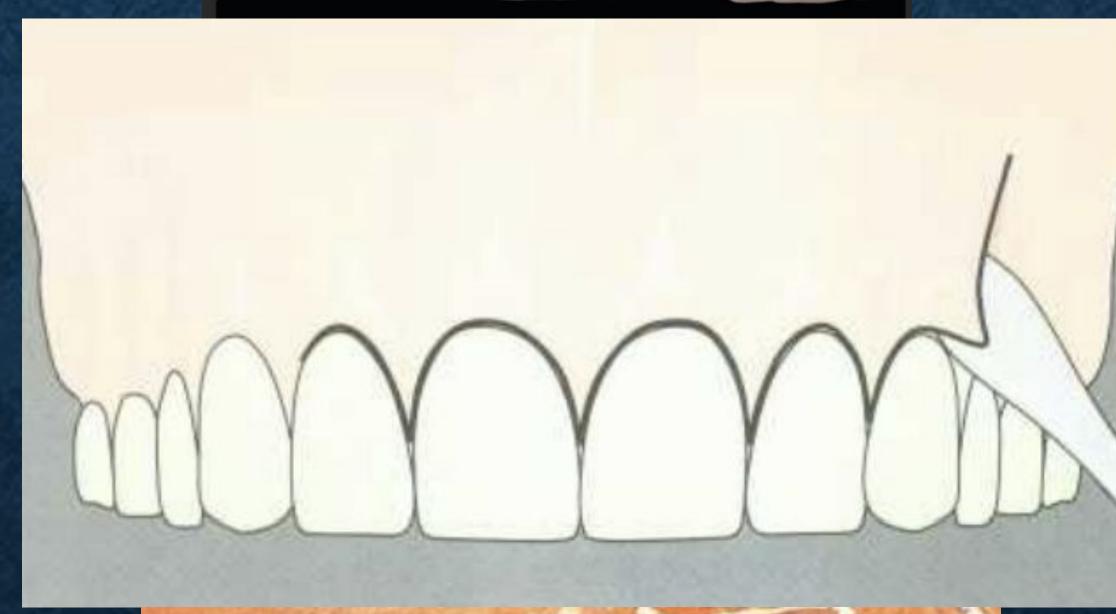
#### Advantages

- The possibility of the horizontal incision crossing the osseous defect is eliminated
- The crestal exposure facilitates simultaneous periodontal curettage and alveoloplasty
- Greater access is afforded for lateral root repair
- Flap design is advantageous when treating short roots and/or defects in the coronal third of the root
- The flap is easy to reposition because the gingiva has basic reference points
- The blood supply to the flap is maximal.

## Retraction









# Osteotomy

To raise an Ochsenbein-Luebke flap, the elevator edge, with its concave surface facing bone, cleaves the periosteum from bone apically and laterally until the bone above the lesion is exposed.

When attempting to raise an

When attempting to raise an intrasulcular flap and a periodontal pocket exists, initial resistance to normal elevating forces may be met and the gingival tissues are in danger of tearing. It is best to change to a smaller tipped elevator and release the gingival tissues 3 to 5mm above/below the sulcus by entering the vertical incison laterally before proceeding with the normal apically directed forces.

When the bone exposing a lesion is dense, misdirected penetration may lead to root damage. Root length may be approximated from a prior radiograph or an intracanal file measurement; digitized from a radiograph.

The bone covering a lesion is often thin and requires only a curette to expose the lesion. Once penetration has occurred, the window can be widened to expose the target root. This is particularly important when dealing with small molar lesions where the buccal bone is dense and the target apex more difficult to identify

Elevation of healthy crestal tissue begins by inserting the elevator edge at the junction of the vertical and horizontal incisions, and applying apical and vertical force until the gingival tissues including the flap are freed and the entire flap is lifted to a level superior or inferior to the lesion

