

# Techniques in micro-surgical endodontics: Retrograde filling.



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## HEMORRHAGE CONTROL

- High Volume aspiration
- Local vasoconstriction
  - Local anesthetics (1:50,000)
  - Epinephrine saturated gauze
  - Racemic epinephrine
- Adjunctive coagulants
  - Gelfoam
  - Surgicel
  - Avitene
  - Bone wax
  - Agglutinates
  - Collaplug and collacote

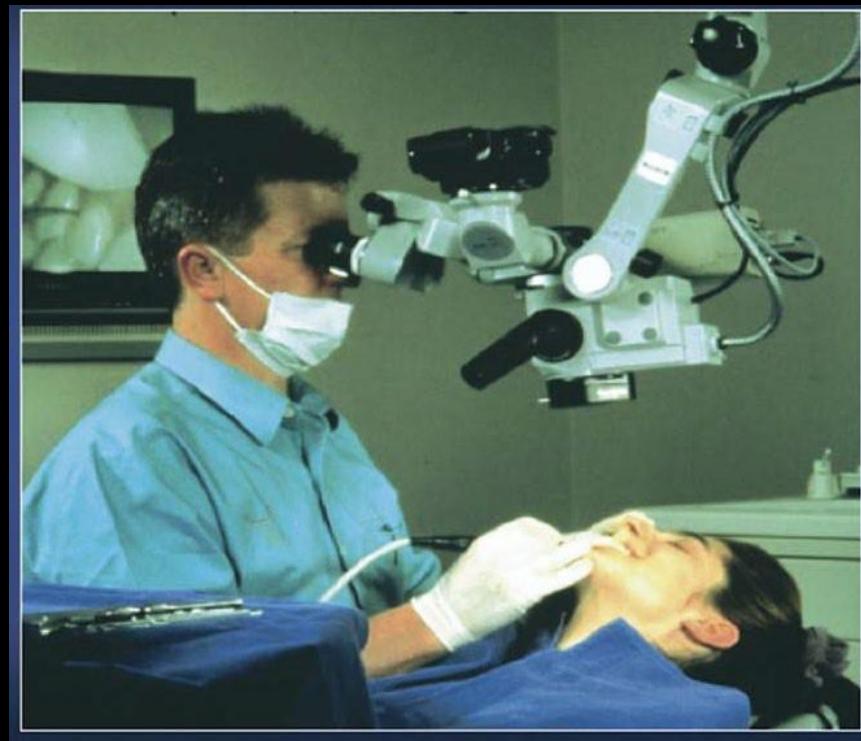


## ROOT END FILLING MATERIAL

- Biocompatible material capable of producing a hermetic seal.
- Most widely advocated materials are,
  - BC Root repair putty
  - MTA
- Materials used in past
  - Gutta-percha
  - Amalgam
  - Zinc oxide
  - Dentin bonding agents
  - Glass ionomers

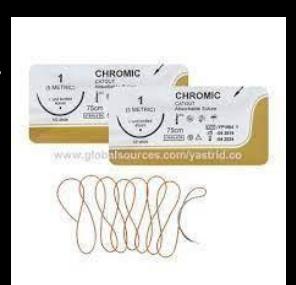


## ROOT END FILLING PROCEDURE

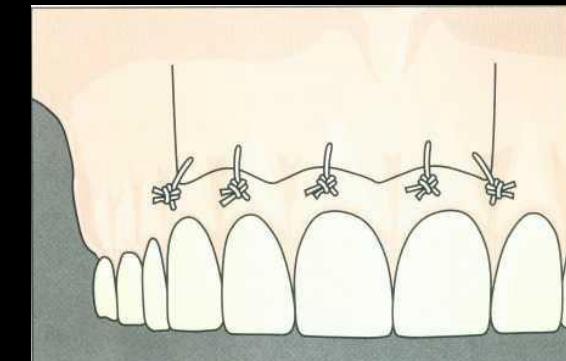


## SUTURE MATERIALS

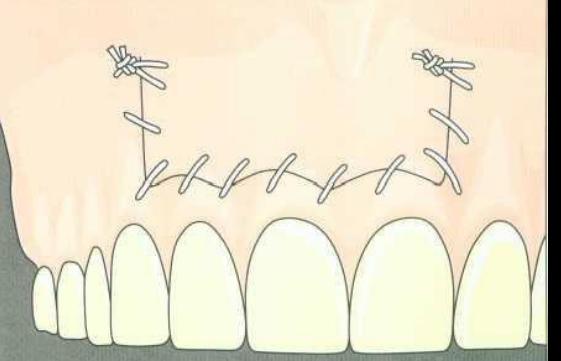
- Strong,atraumatic, non allergenic, use.
- Most commonly used sutures are
  - Black silk,
  - Polyester
  - Polyamide-n
  - Gore-tex
  - Catgut



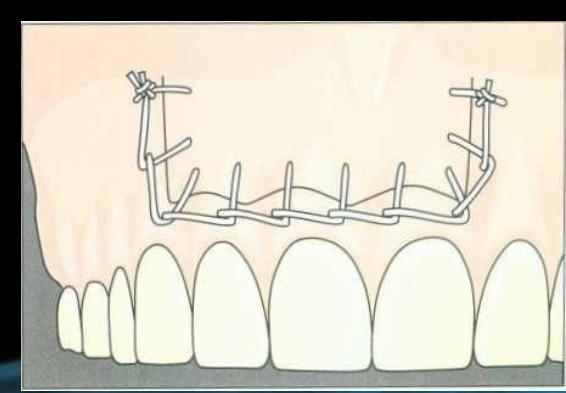
## SUTURING TECHNIQUES



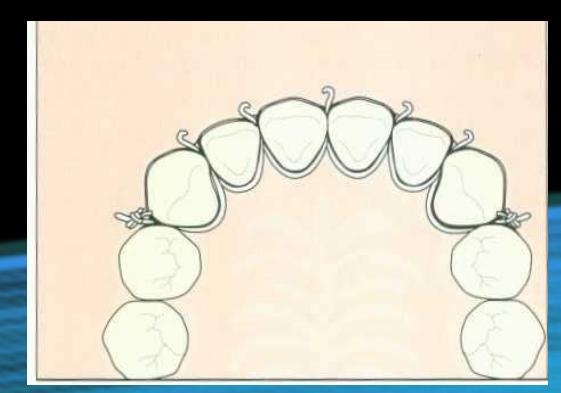
INTERRUPTED SUTURE



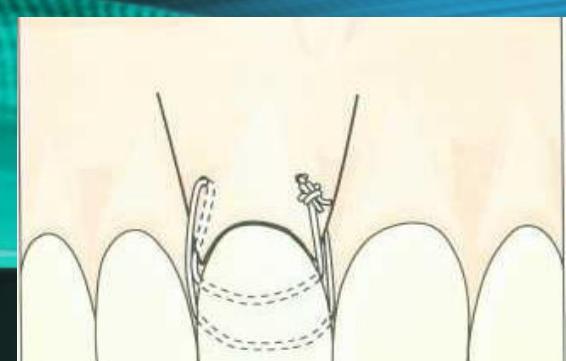
MATTRESS SUTURE



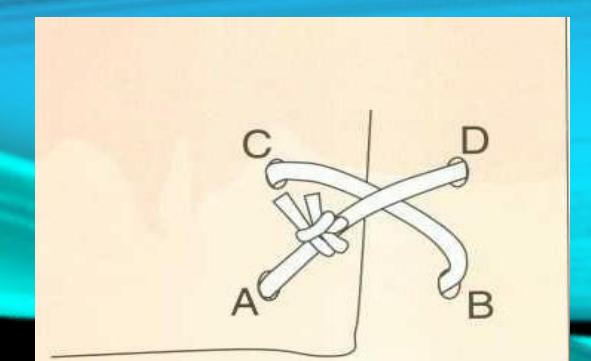
BLANKET SUTURE



SLING SUTURE



BASKET SUTURE



VERTICAL INCISION SUTURE

Reference: Arens Practical lessons in endodontic surgery