

Isolation of the operating field

Restorative dentistry 3rd year

Lecture 2



Dry field in oral environment?

- Access
- View
- Setting of materials



What does complicate the treatment?

- Saliva
- Cooling water spray
- Blood



Dry field management

Relative dry field

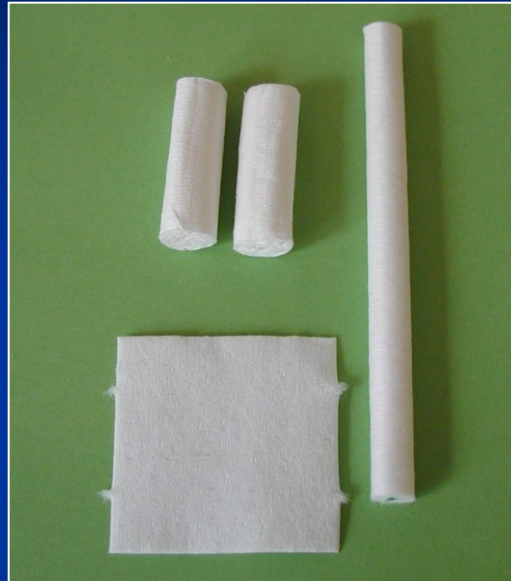
Absolute dry field



Relatively dry field

Cotton rollers

Cotton squares



Cotton cups



Relative dry operating field

- Belvedere matrix
- Wooden wedges
- Minidam





Wooden wedge

Access to the cavity
(retracts the gingiva)

Dry field
(stops bleeding)

- Matrix adaptation
(presses the strip tightly)



Absolutely dry operating field

Rubber dam (kofferdam)

A membrane which isolates the operation field from oral environment.





Frame

Rubber

Sheet

Punch forcep



Clamp

Components

Clamp forceps



Benefits

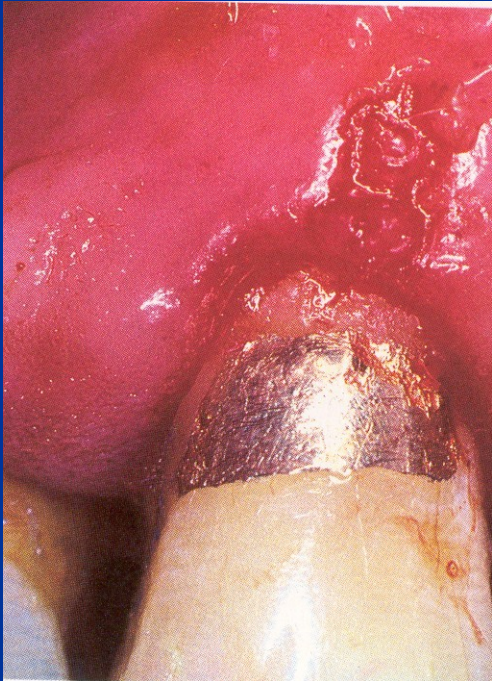
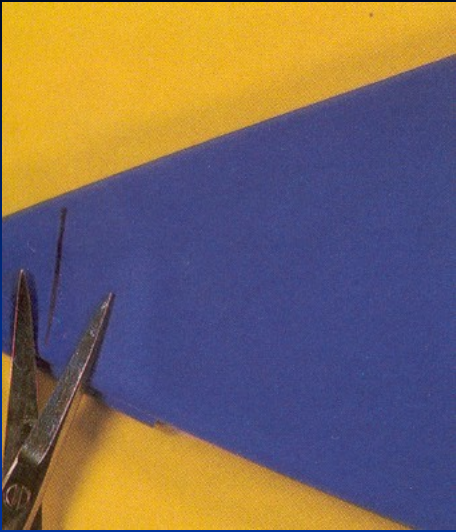
- Protection of patient against gulp or aspiration
- Protection of dentist and assistant against infection
- Aseptic approach
- Absolute dry field
- Retraction of soft tissues
- Protection of soft tissues
- Better access to the operation field



RISKS

- Limitation of oral breathing
- Fear
- Latex allergy
- Aspiration or gulp of the clamp
- Damage of hard and soft tissues

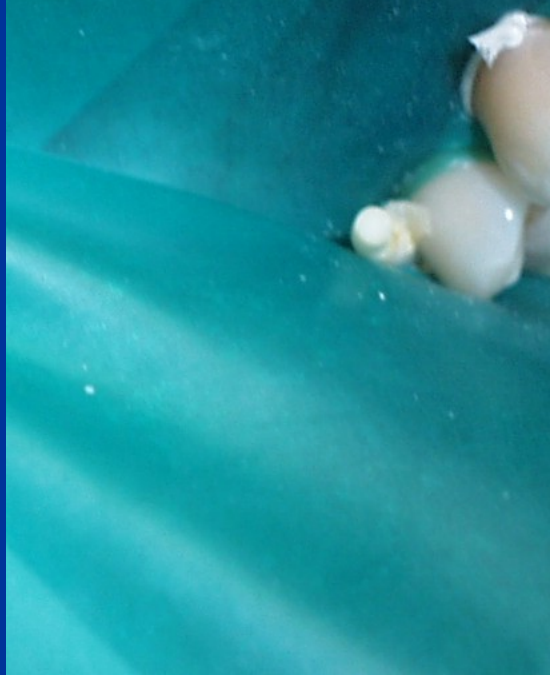






Contact allergy



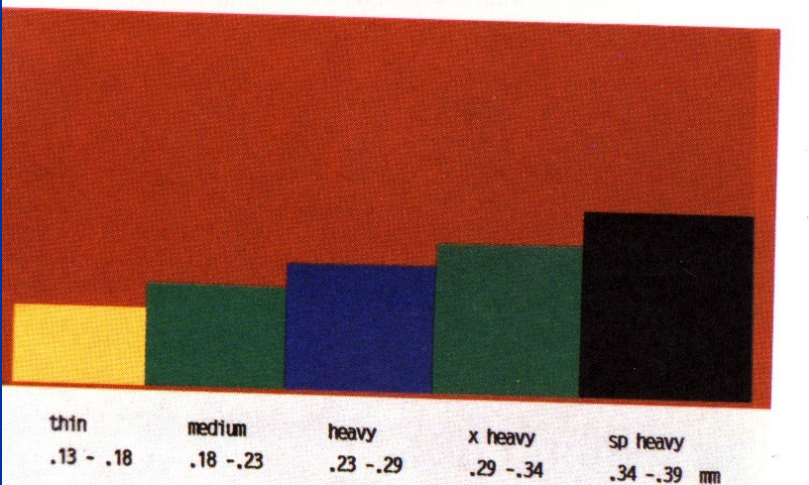




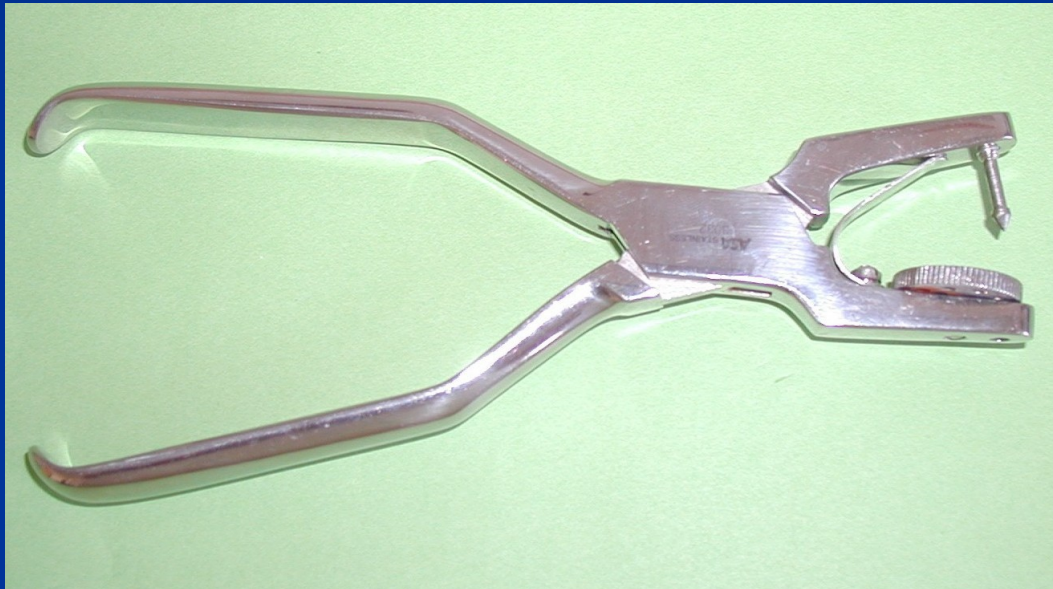
Rubber

Roll

Square (blank)



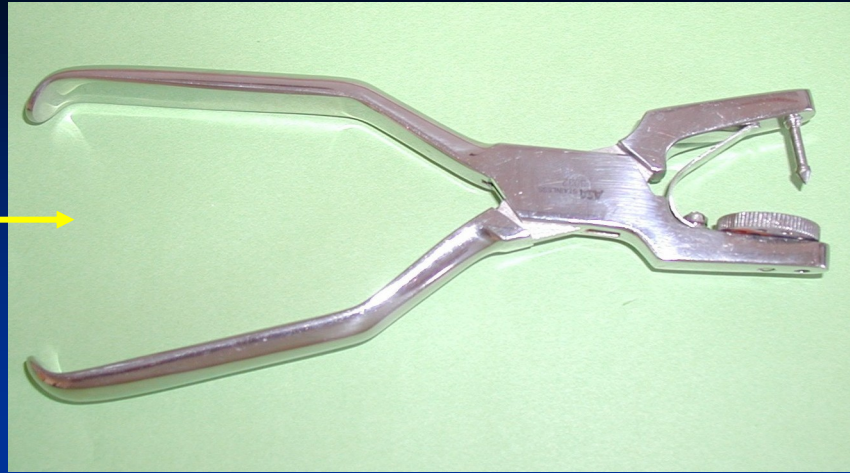
Perforation



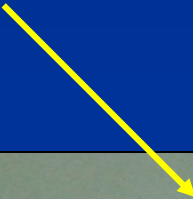
Round aperture

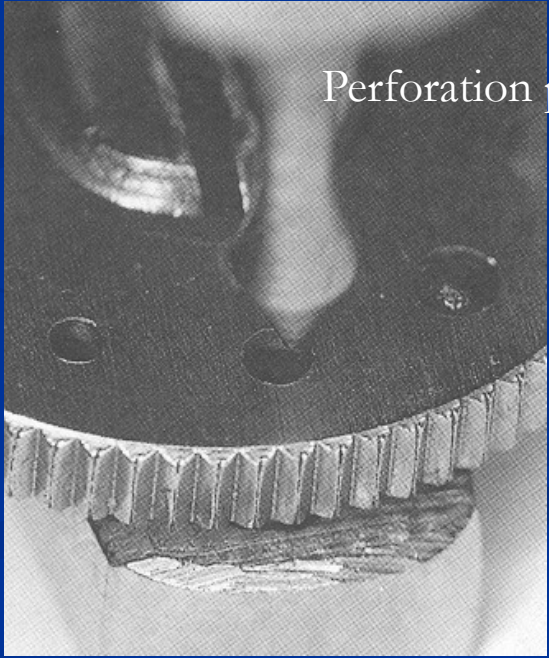
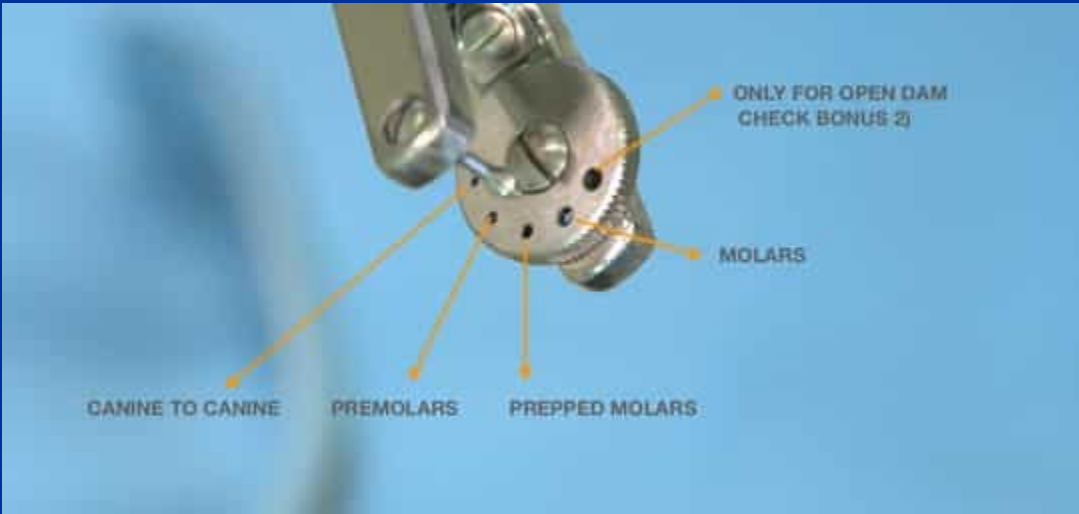
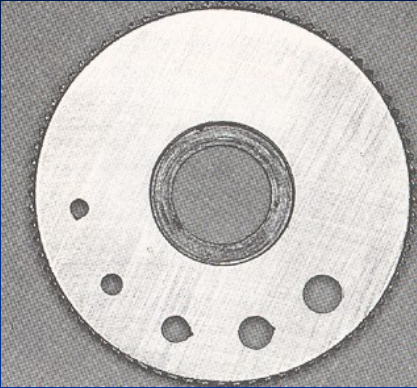


Ainsworth



Ivory





Perforation plate



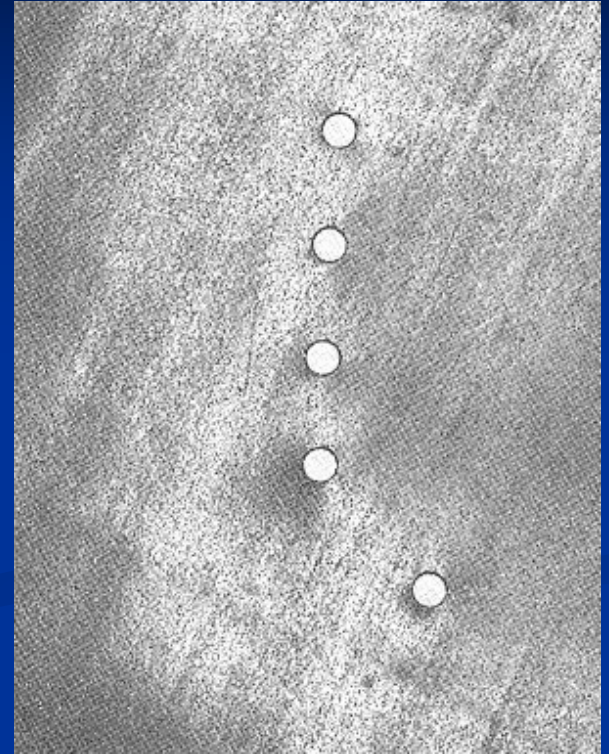
How big will the perforation be?

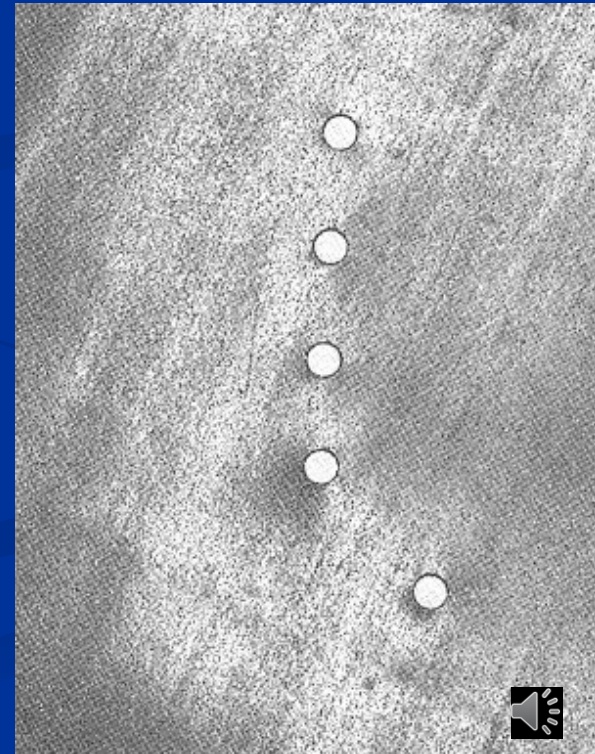
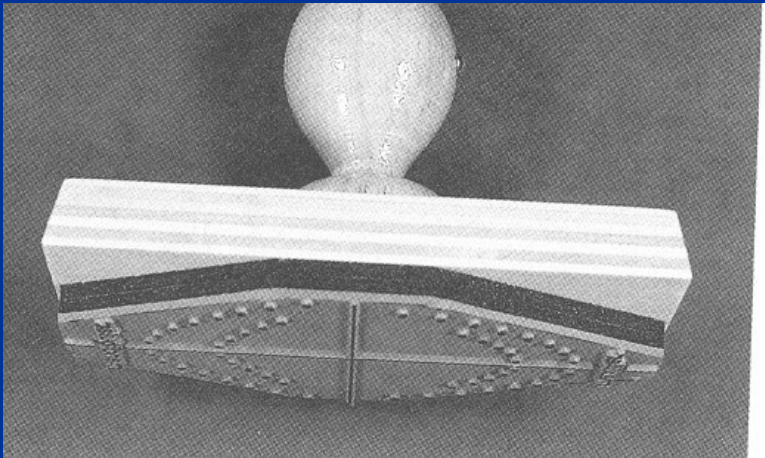
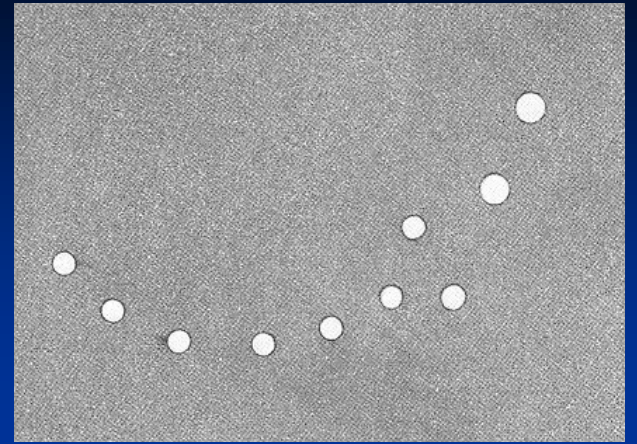
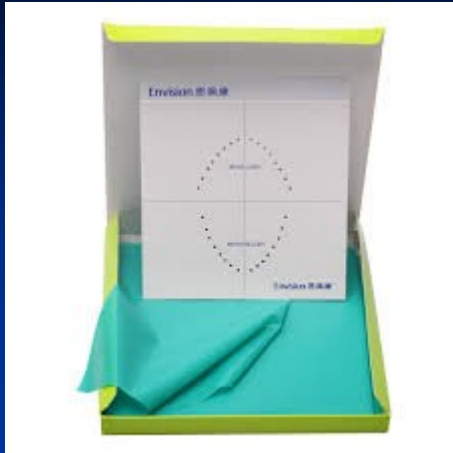
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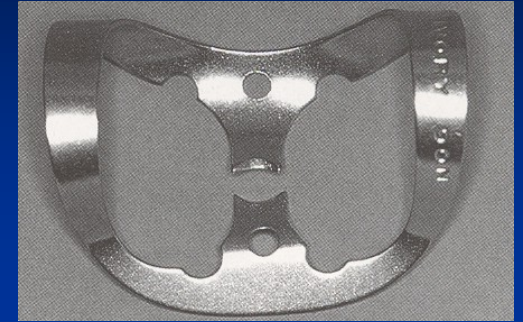
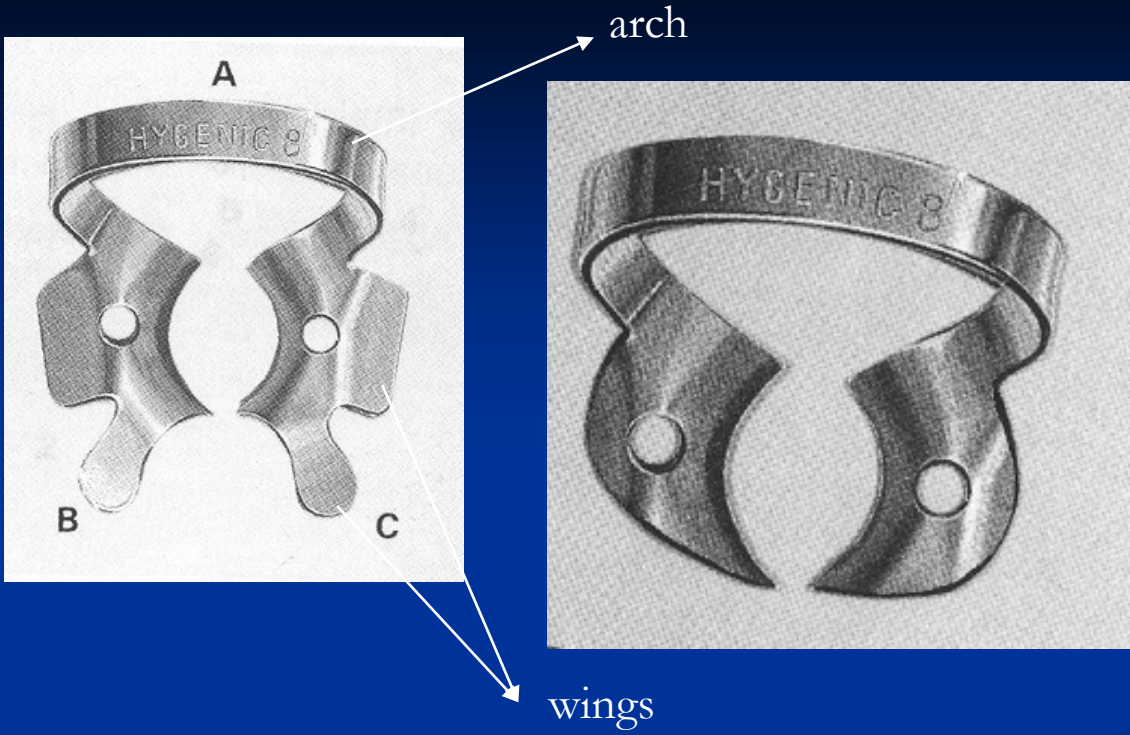
Size of the tooth

Thickness and kind of the rubber dam

Mode of application

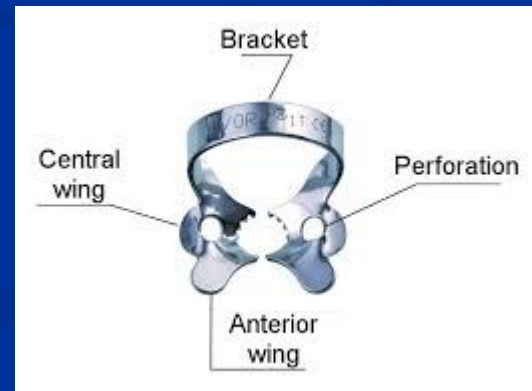
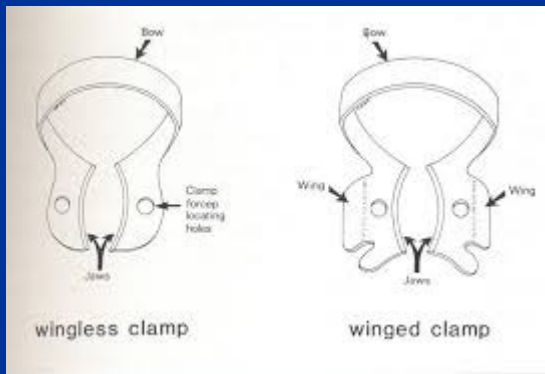
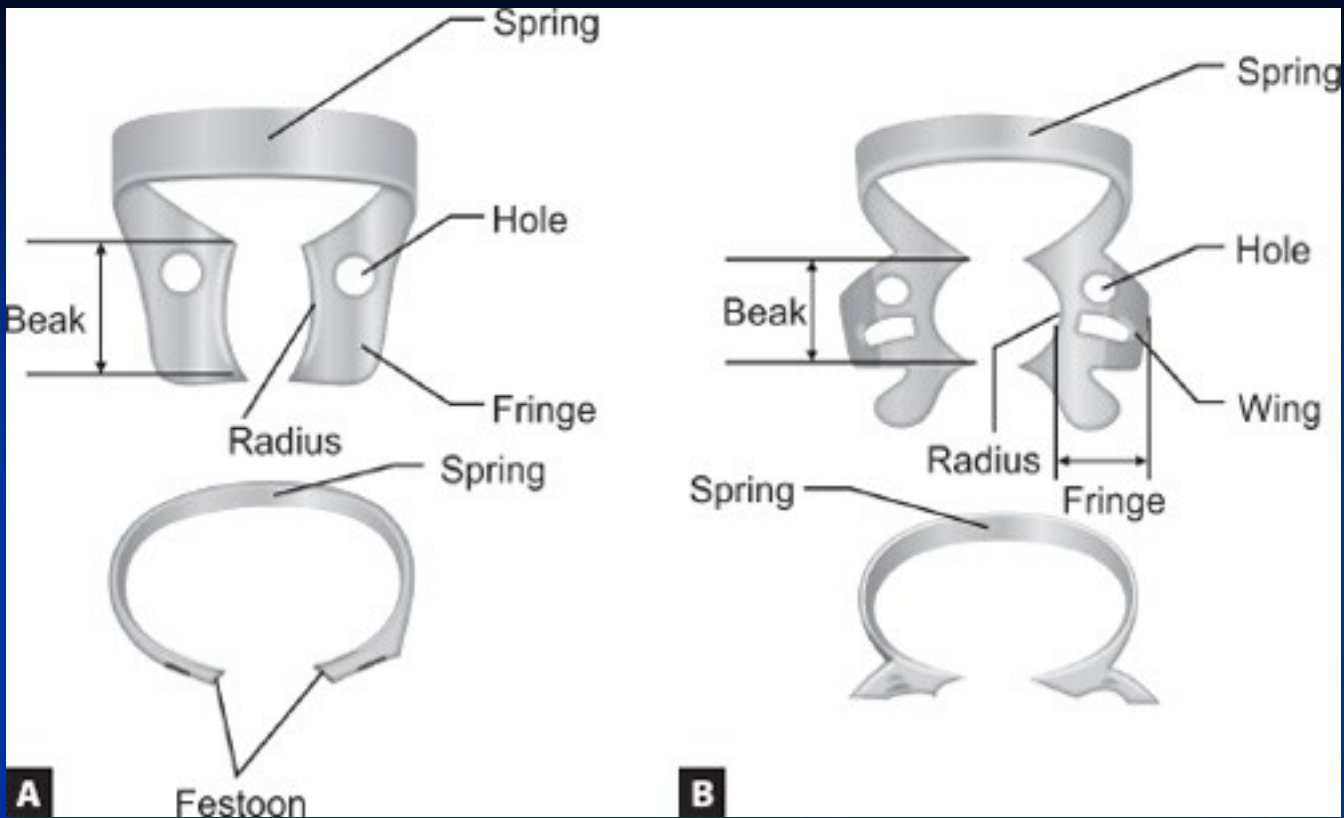






Arch, wings,





FIESTA® Color Coded Matte Finish Winged and Wingless Clamps

ANTERIOR



MOLAR



Small lower

Lower

Lower

PREMOLAR



Large bicuspid

Bicuspid



Upper

Small upper

Upper and lower

SERRATED JAWS

Serrations for improved retention



Lower right molars/
Upper left molars

Lower left molars/
Upper right molars

MOLAR - SPECIAL USE

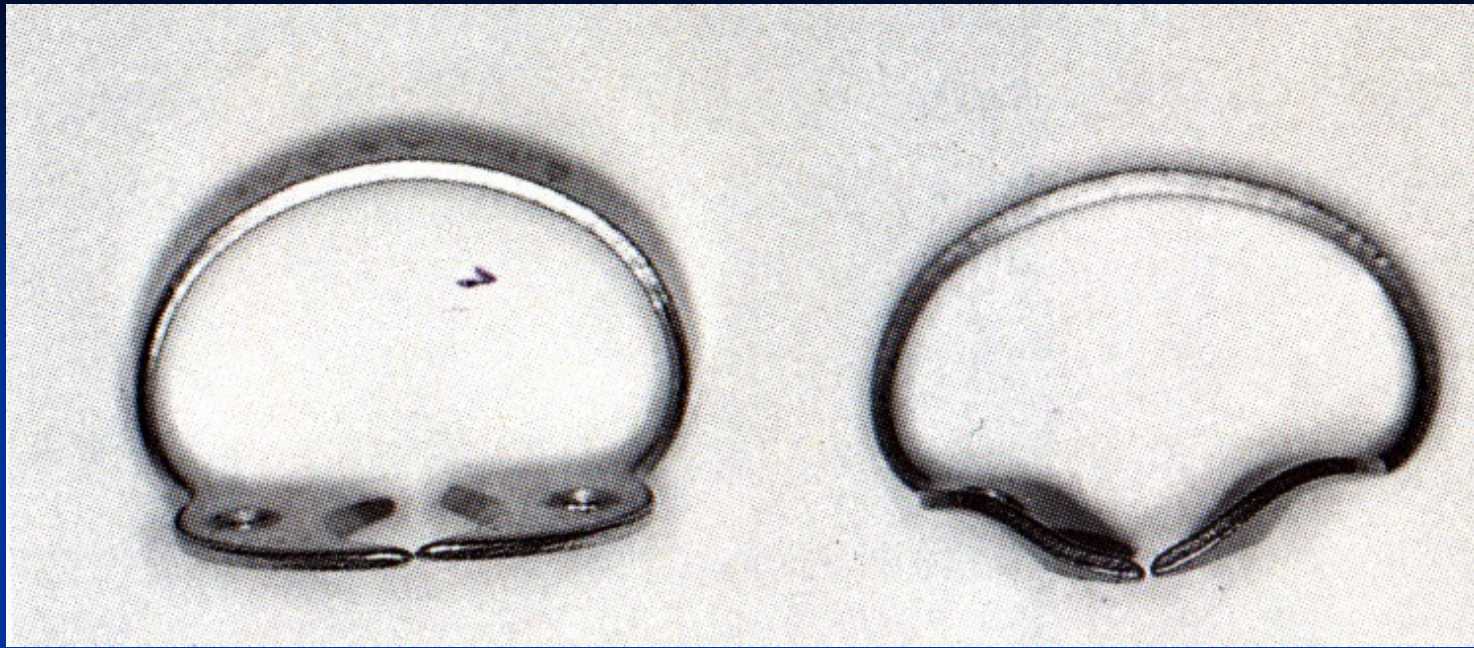
For irregularly shaped, structurally compromised or partially erupted molars



Small

Large

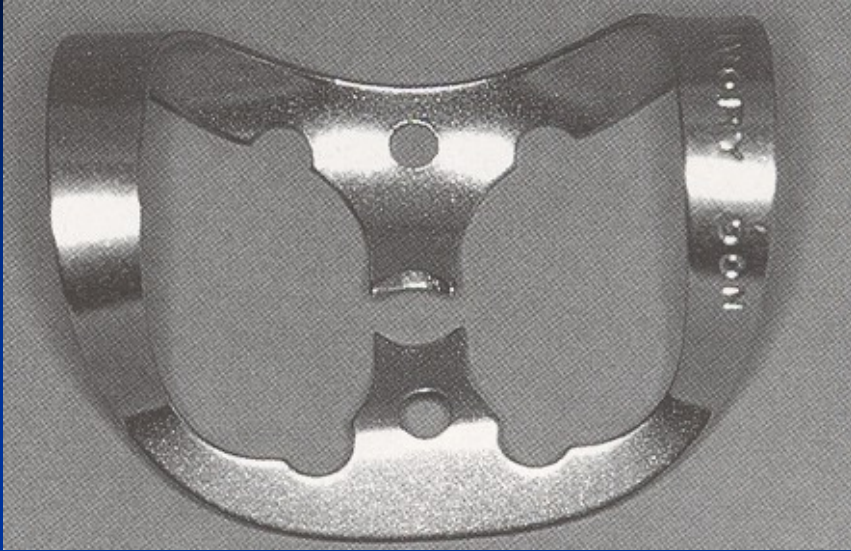


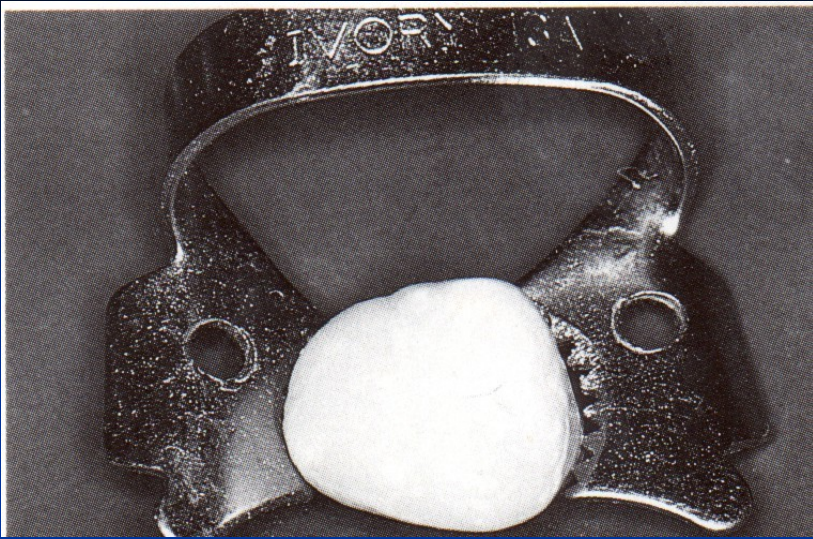


Clamps for retention

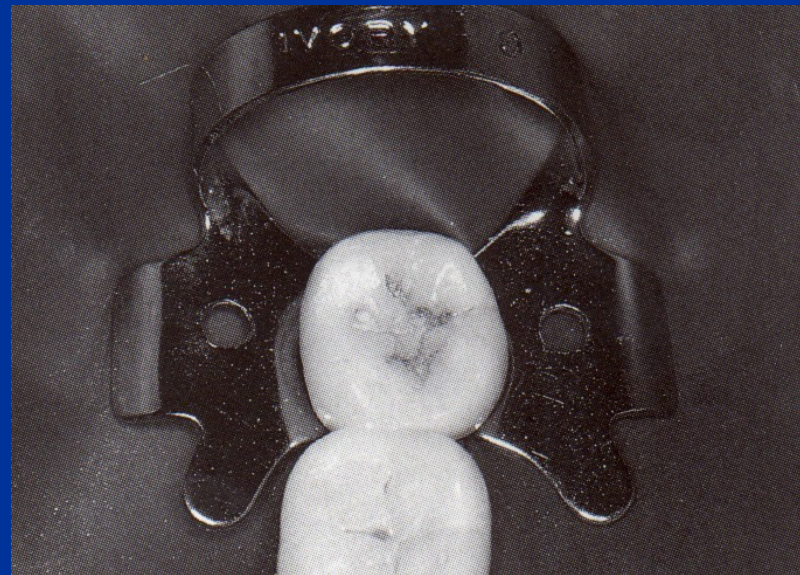
Clamps for retraction





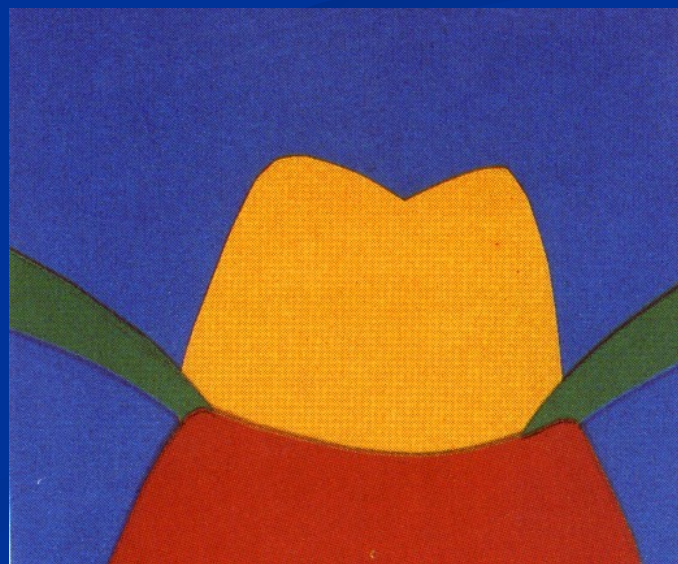
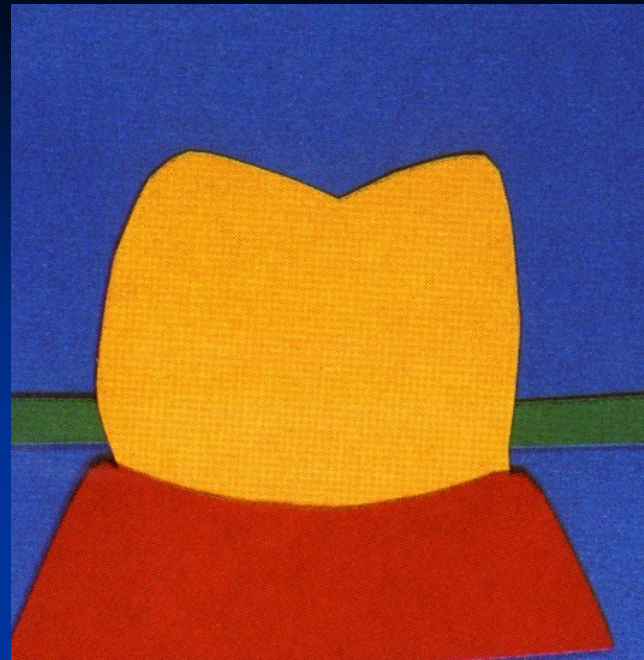
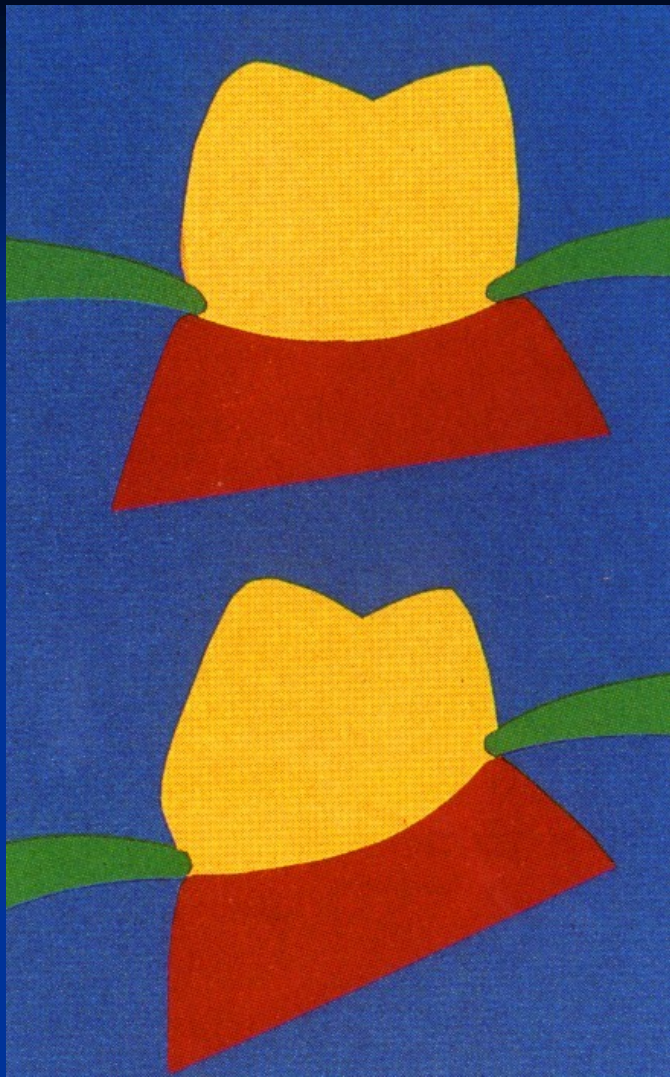


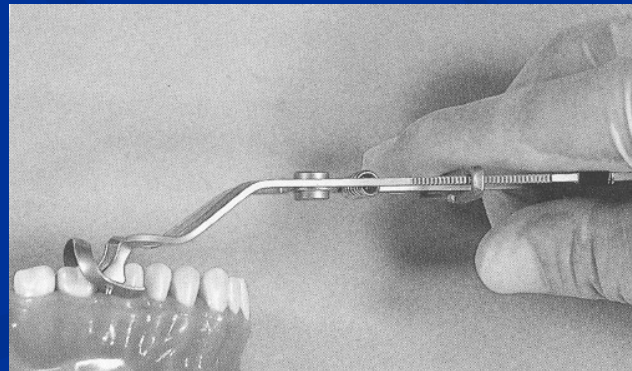
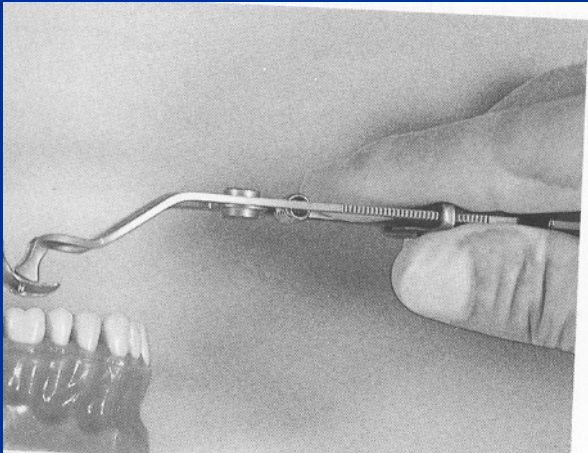
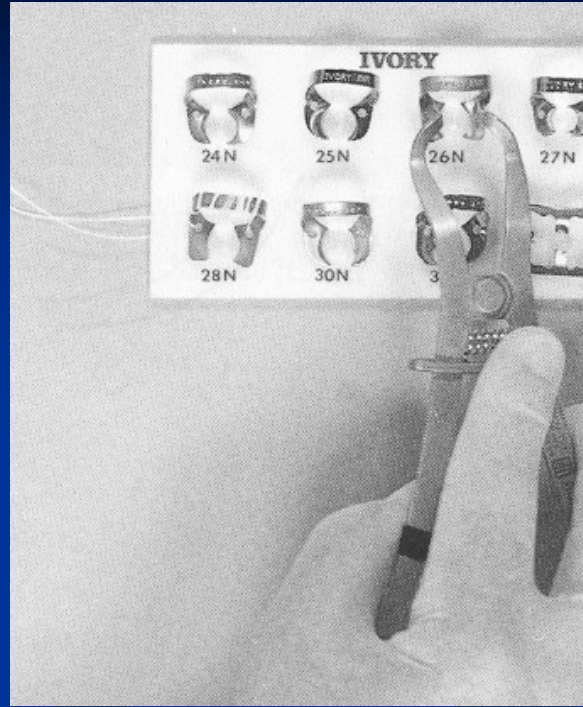
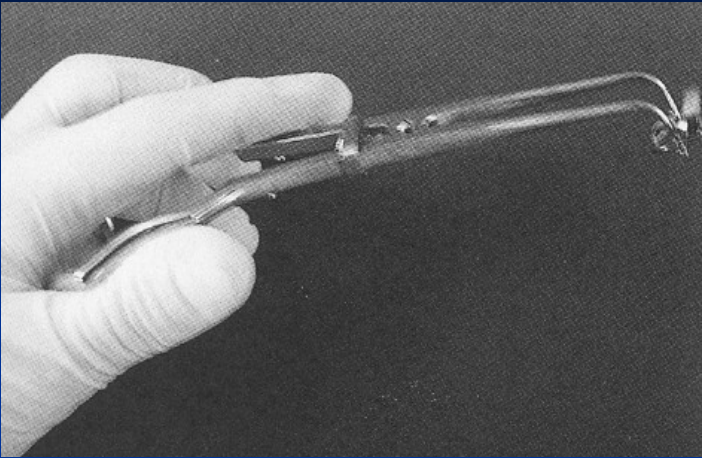
Contact – areal

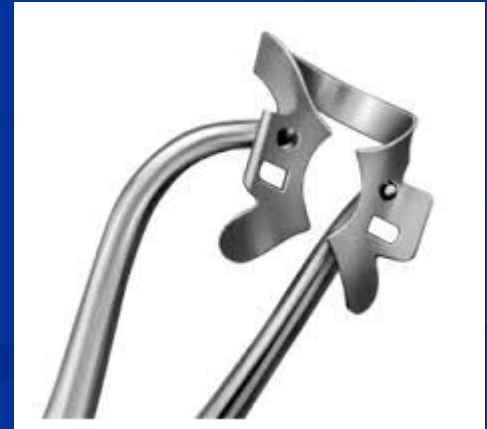
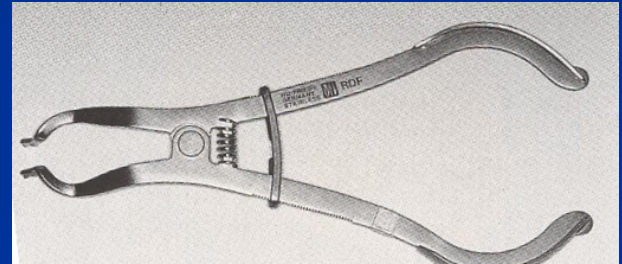
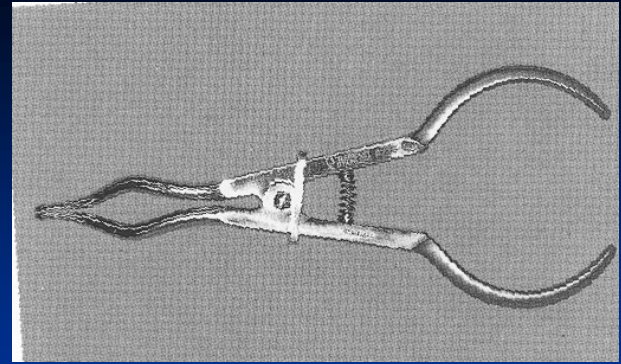
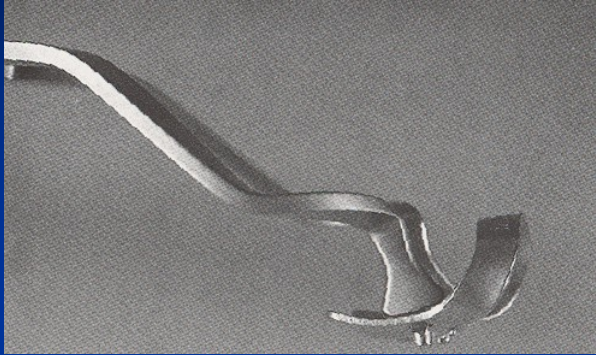


4 pointed

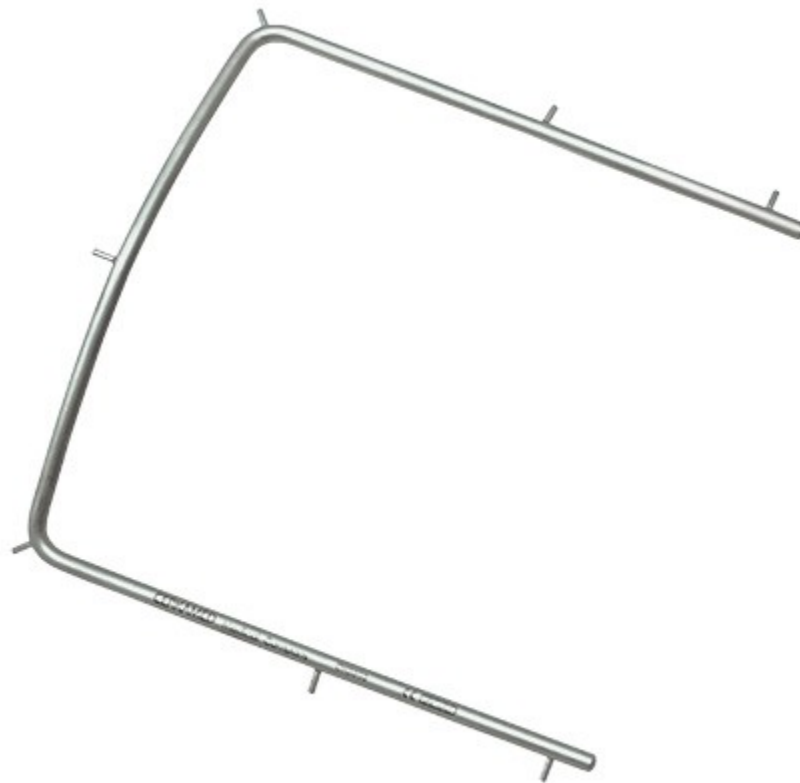


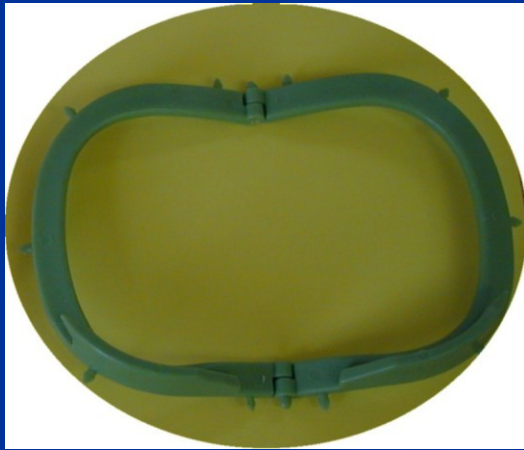


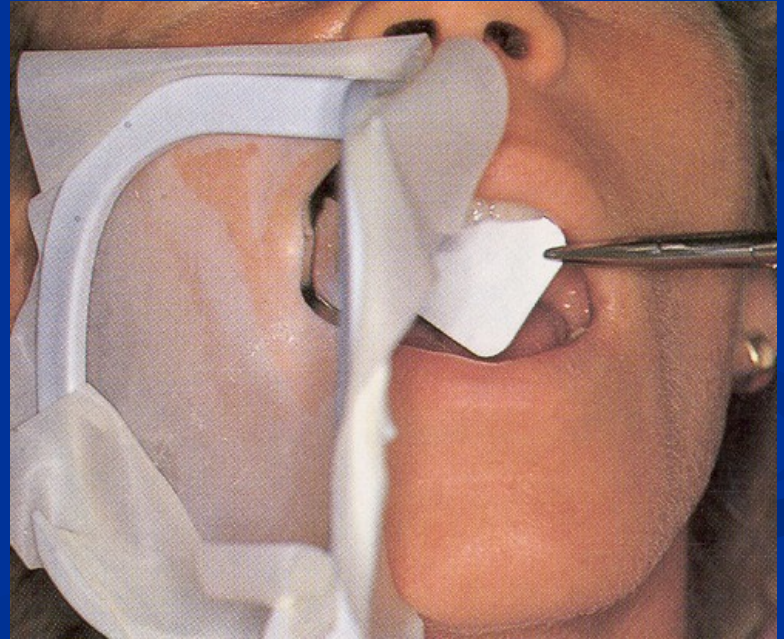


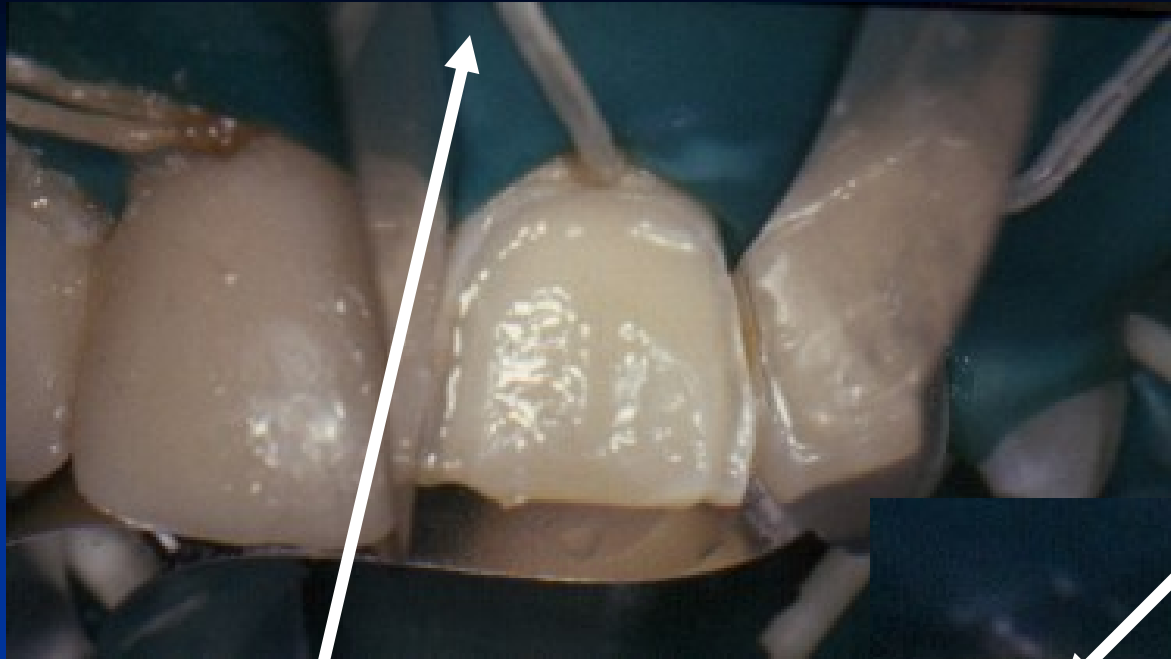


Rubber dam frame









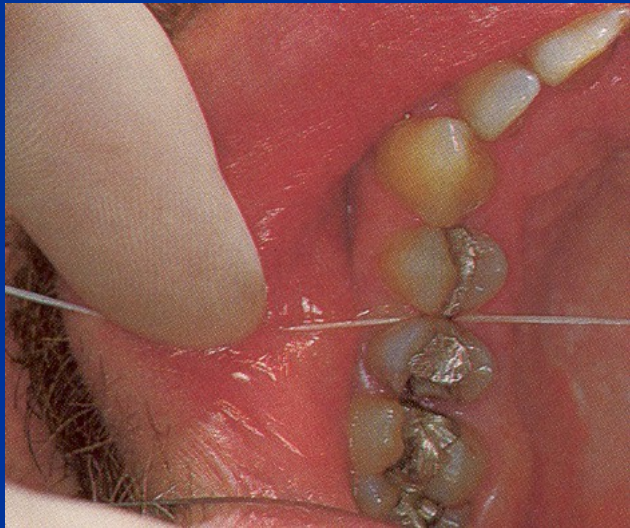
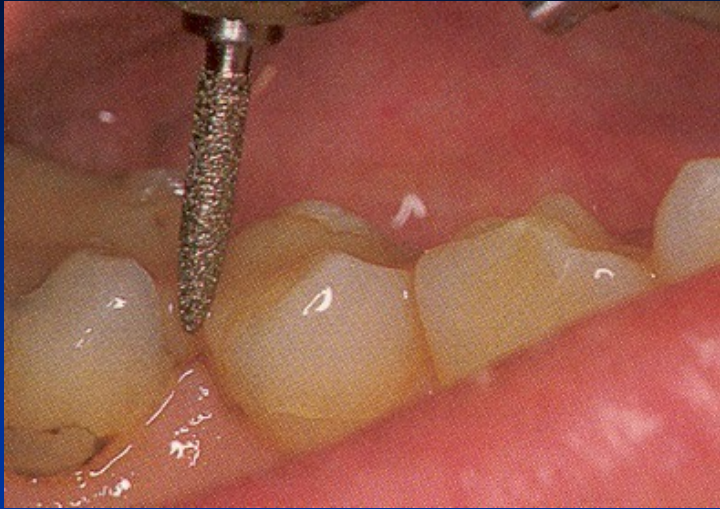
**Latex rollers -
wedjets**

Ligaturs



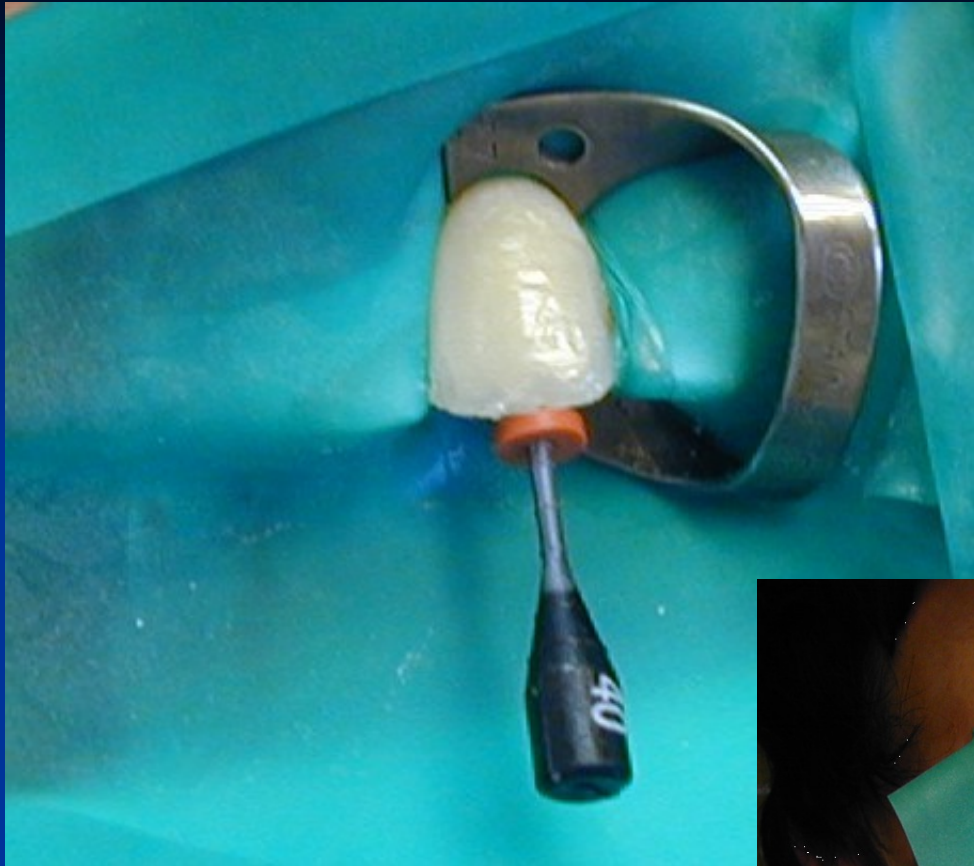








How many teeth
should be isolated?





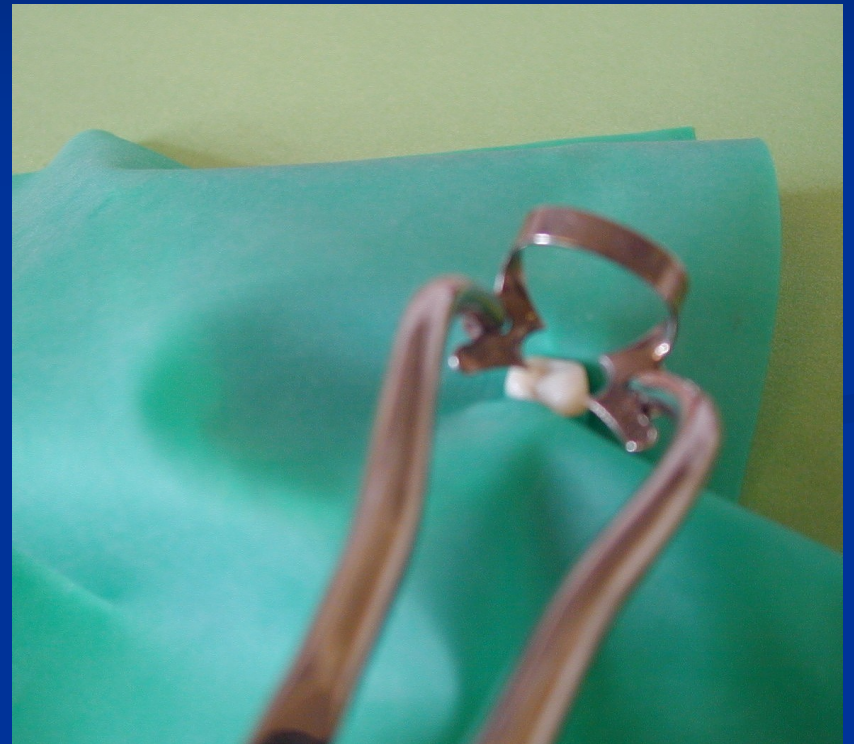
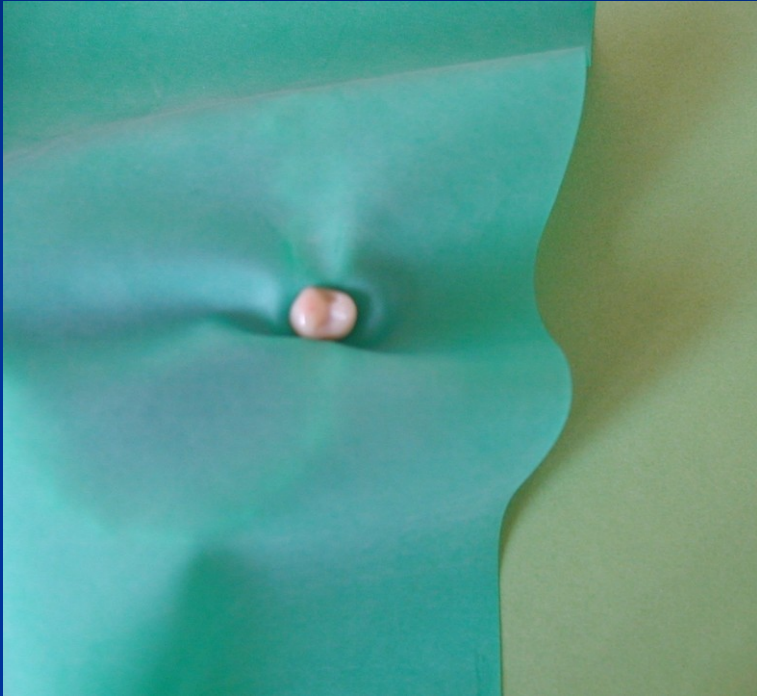


Mode of application

- Rubber first
- Clamp first
- Clamp and rubber dam together
- Application in seconds



Rubber first



Clamp first



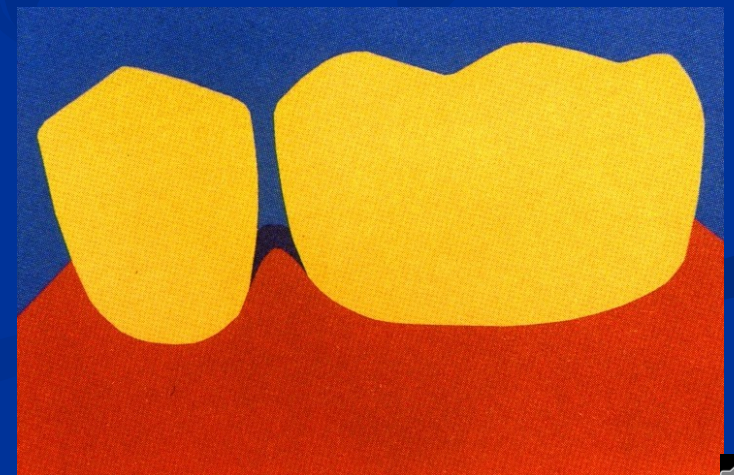
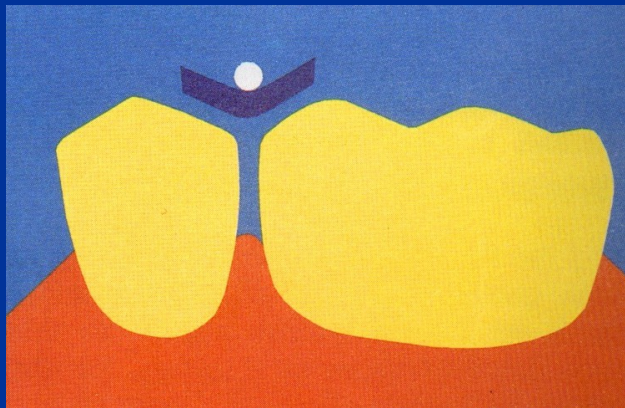
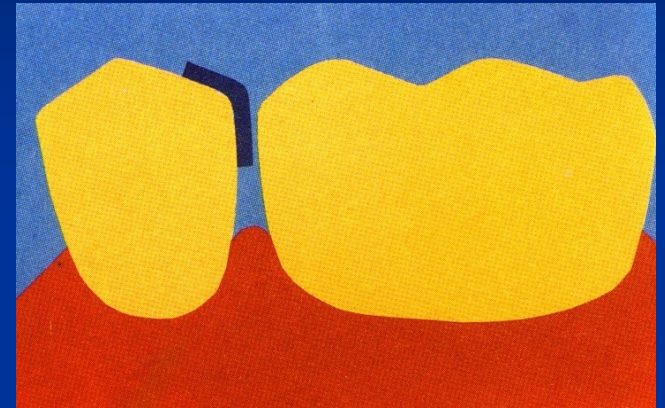
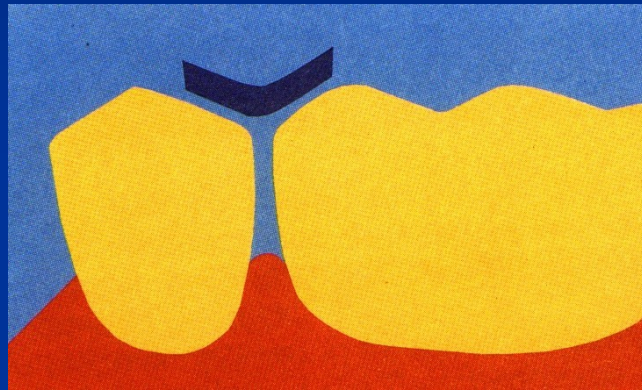
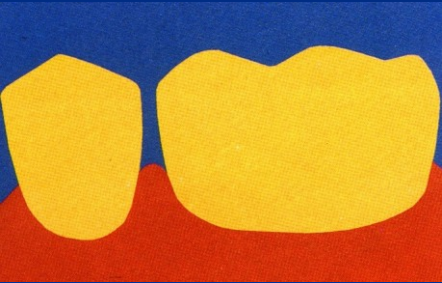
Rubber and clamp together

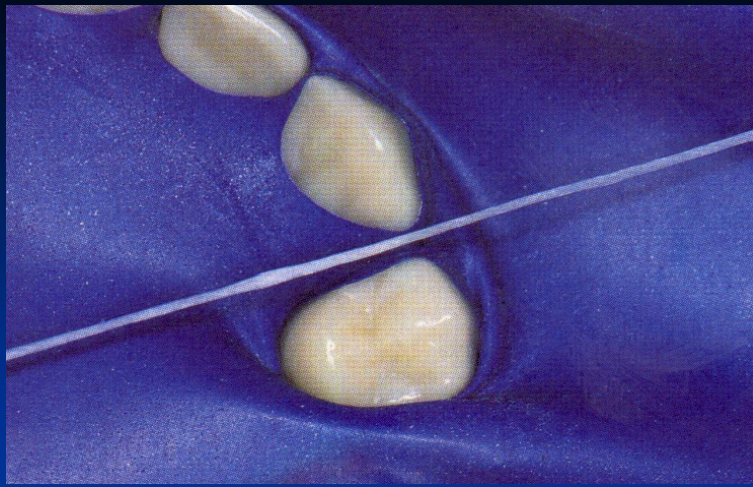


Rubber, clamp and frame together – application in seconds

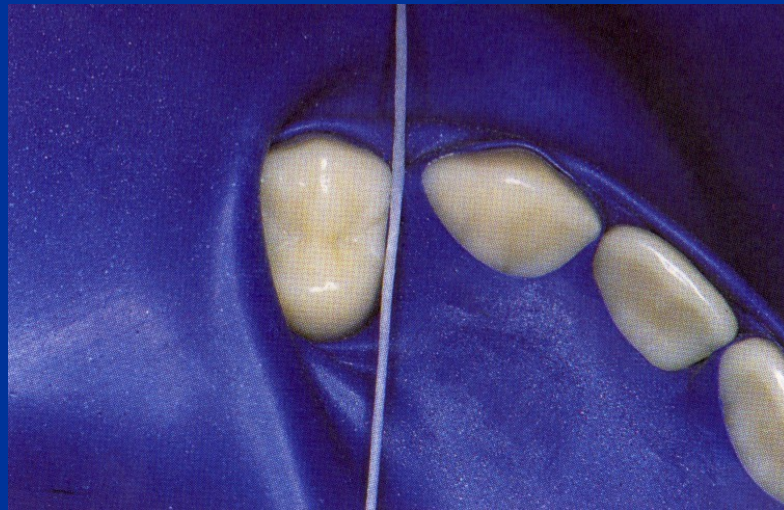


Interdental adaptation





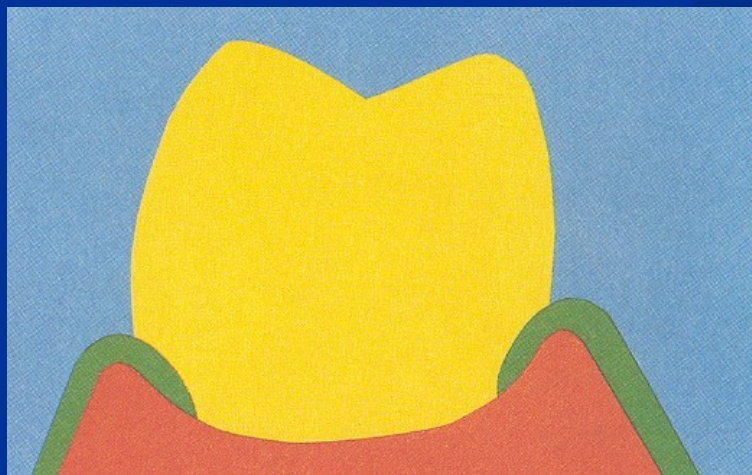
Interdentál adaptation

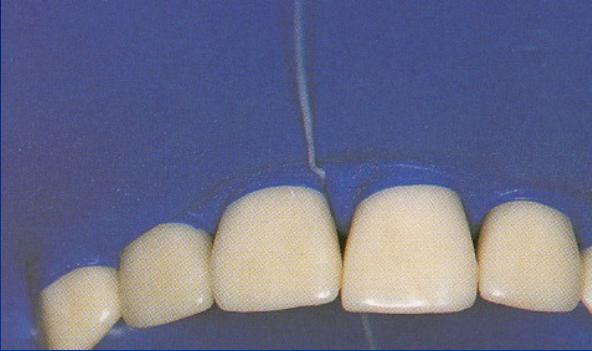


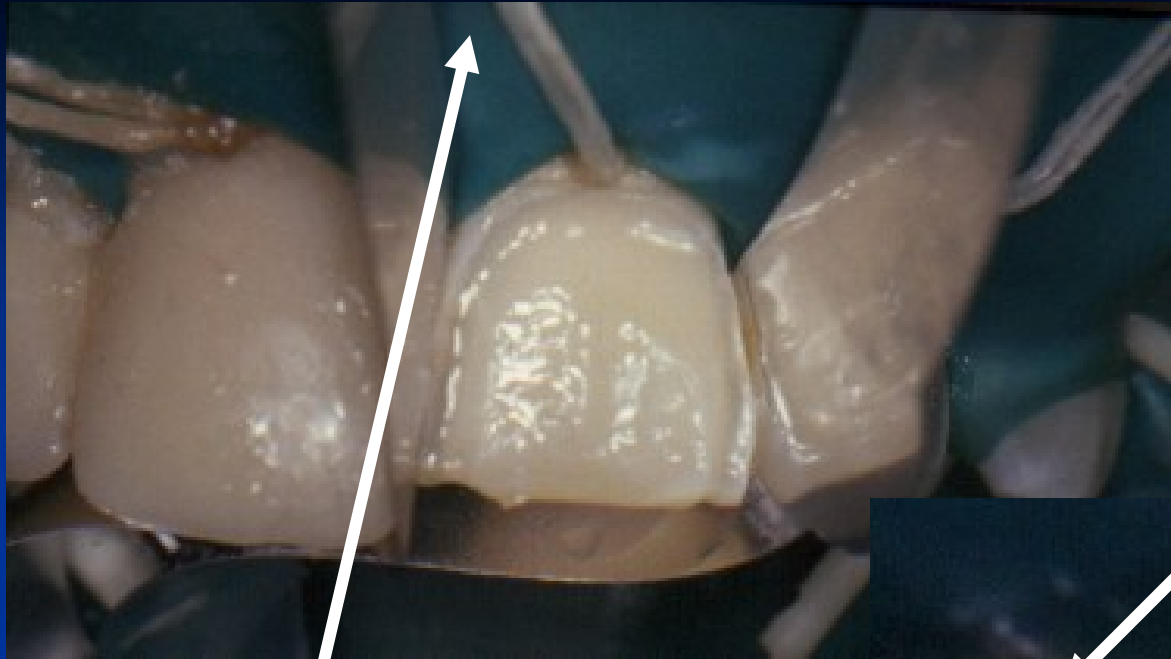




inversion





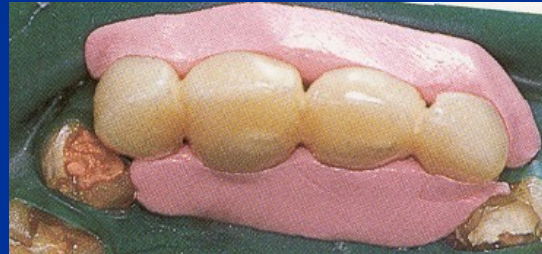
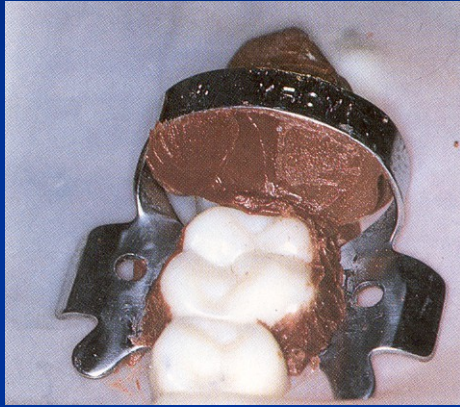


**Latex rollers -
wedjets**

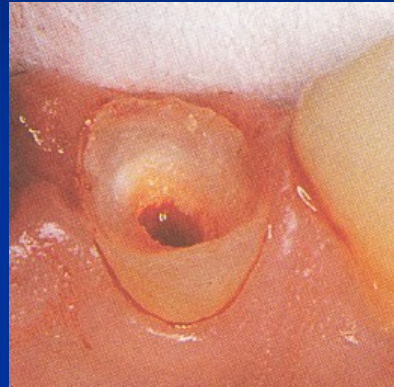
Ligaturs



Thermoplastic impression material



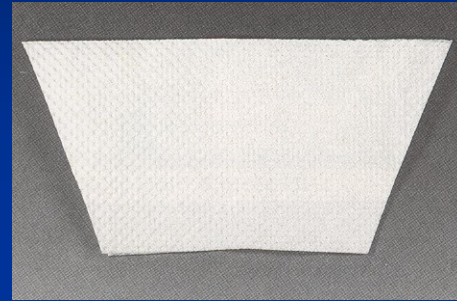
Elongation of the clinical crown before application of the clamp



Lubrication



Napkin



Modifications

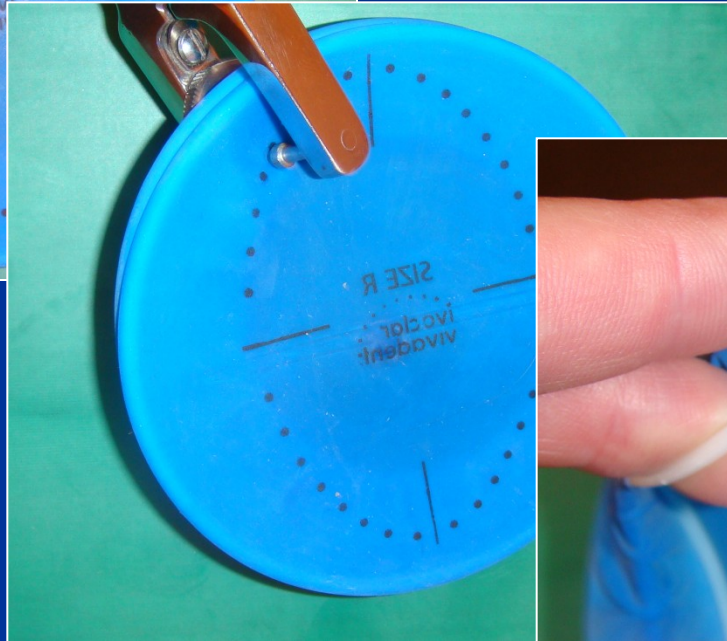
- Optidam
- Optradam
- Minidam



Optidam



tradam





Minidam

