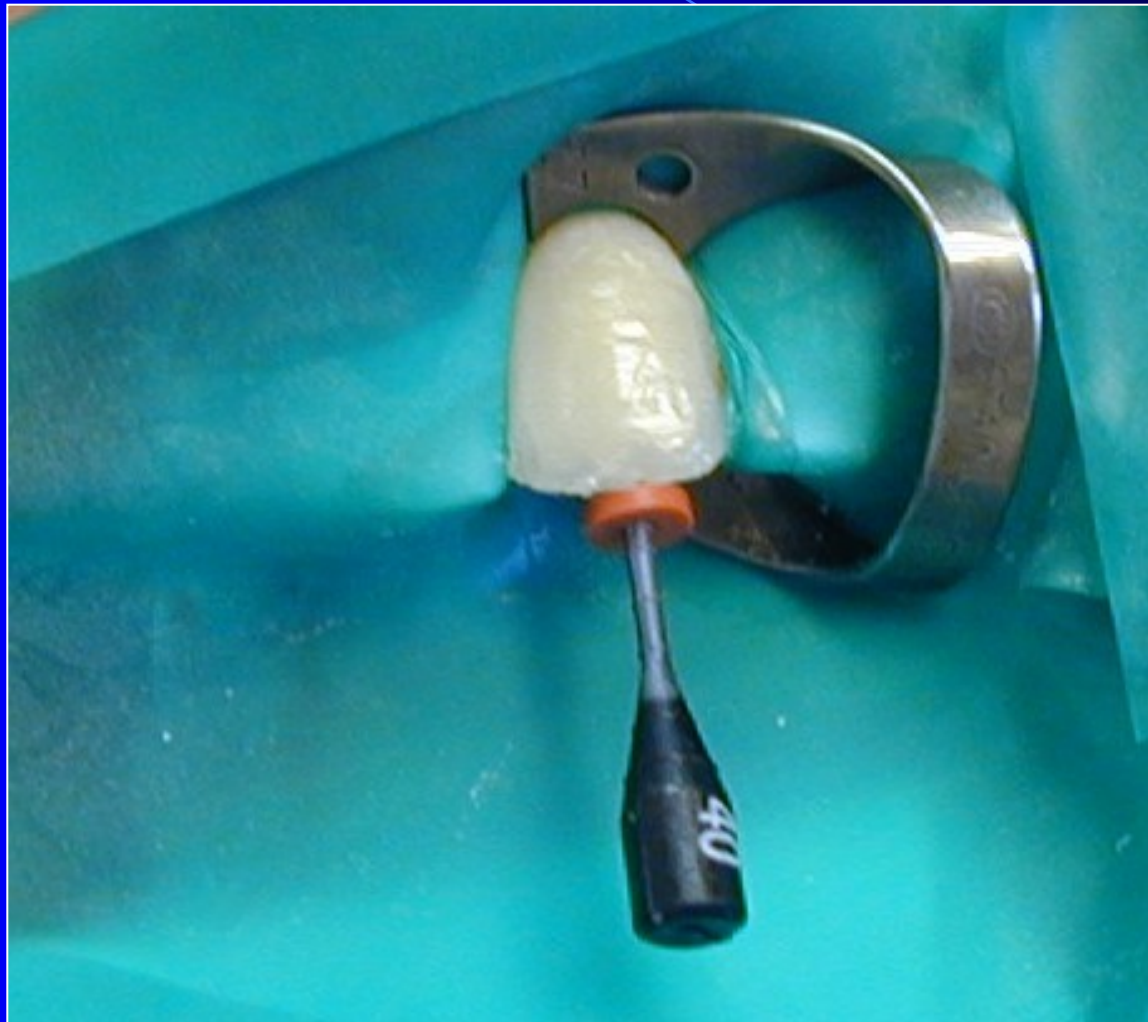


Isolation of the operating field



Goals of isolation

- Moisture control – excluding sulcular liquid, saliva, gingival bleeding, cooling spray, restorative debris
- Relatively and absolutely dry operating field

Relative dry operation field

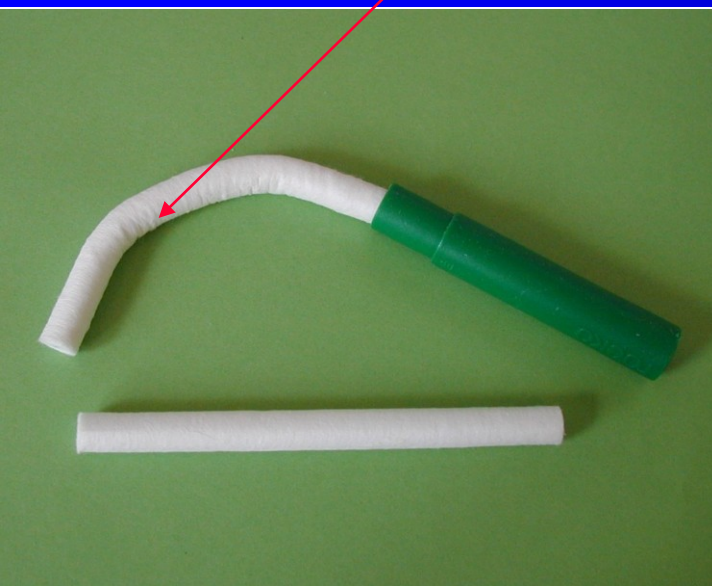
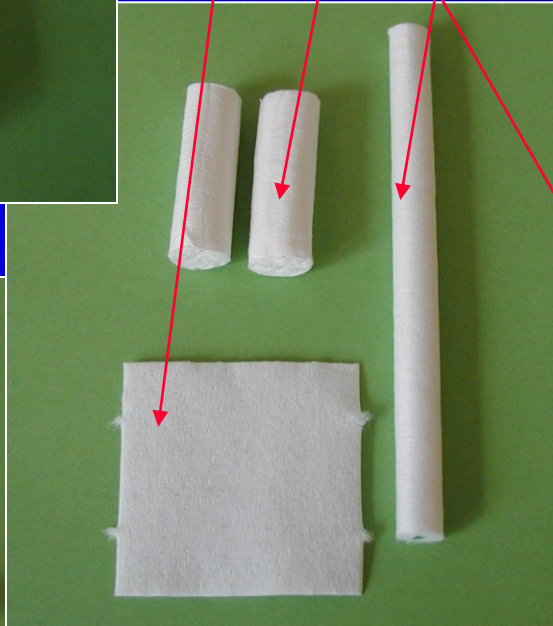
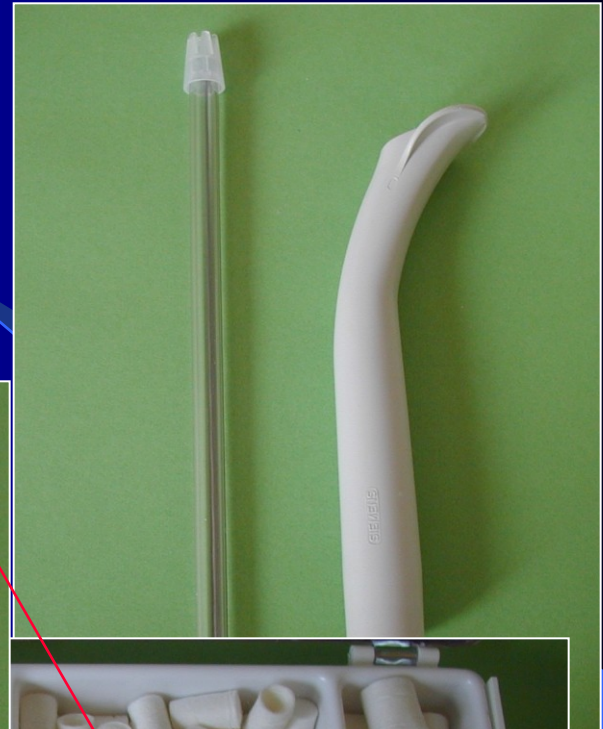
- Excluding sulcular liquid, saliva, gingival bleeding, cooling spray, restorative debris

The operating field is not isolated against moist air - high relative humidity in oral cavity.

Suctions



Absorbents
Minidam
Cotton rollers
Cotton pellets
Cotton cups



Wooden wedge

Compression of gingiva

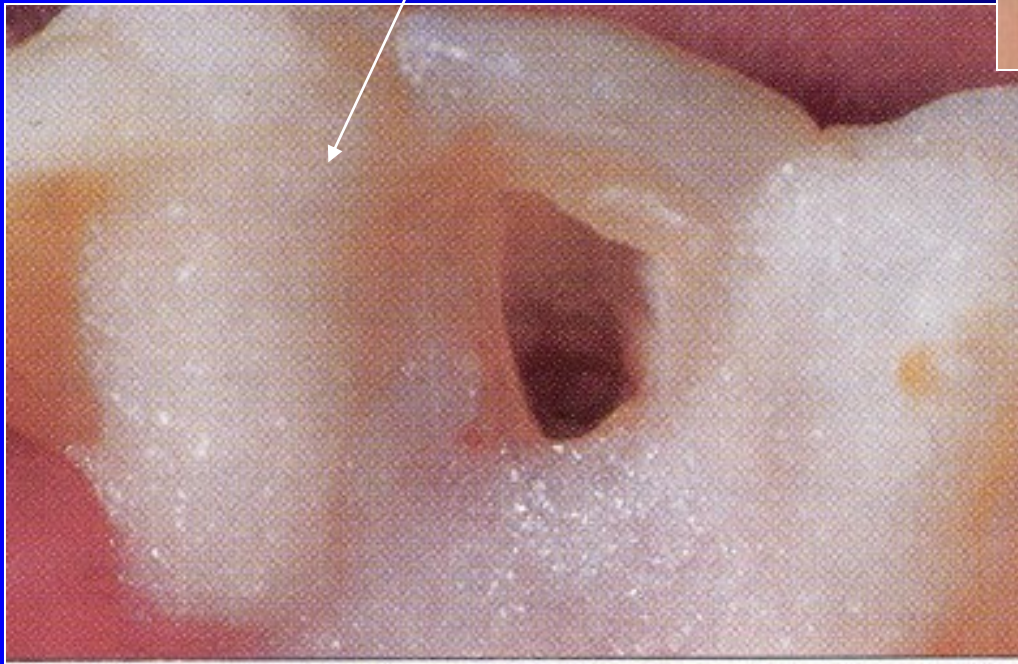
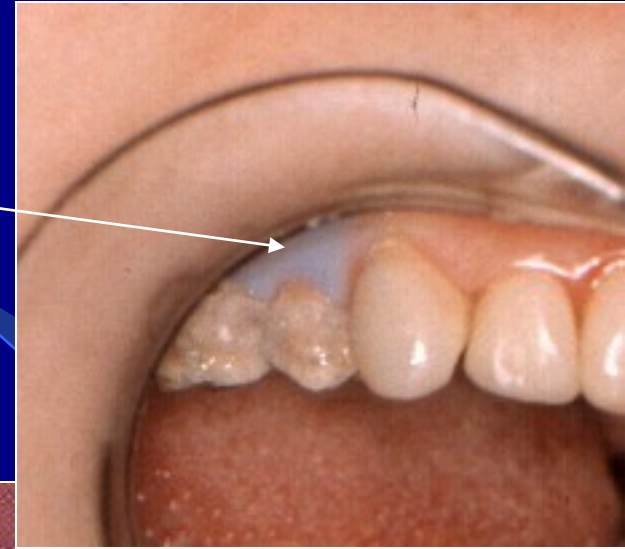
Separation of teeth

Adaptation of matrices

Retraction cords



Special materials – light curing



Absolute moisture control

- **Rubber dam**

- A dry, clean operating field
- Improved access and visibility
- Potentially improved properties of dental materials (curing, bonding)
- Protection of the patient (aspirating, swallowing, protection of soft tissues, mercury exposure) and operator (infection control barrier)
- Operating efficiency

Disadvantages

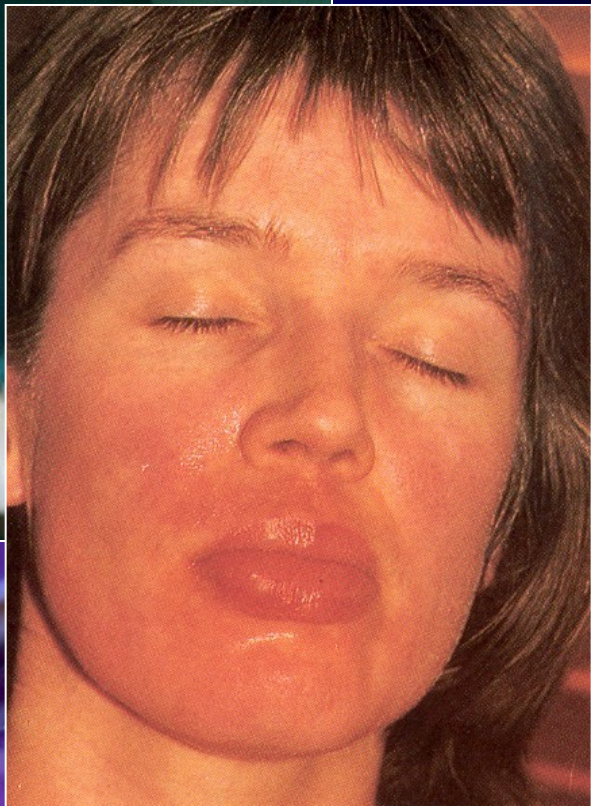
Breathing difficulties (asthma)

Teeth that have not erupted sufficiently to support a retainer

Extremely malpositioned teeth

Psychologic reasons

Latex allergy





Instruments and materials



Rubber dam material

- Deteriorates over time
- lower tear strength

- Available

- Sheets (12,5 x 12,5 or 15x 15 cm)

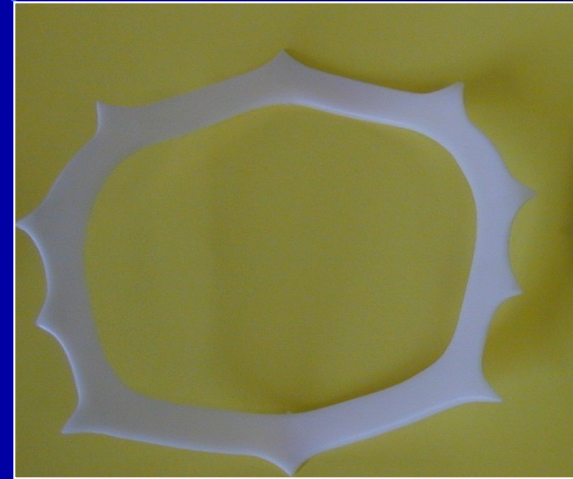
- Roll

- Thickness:

- Thin, medium, heavy, extra heavy,
- special heavy



Rubber dam holder - frame

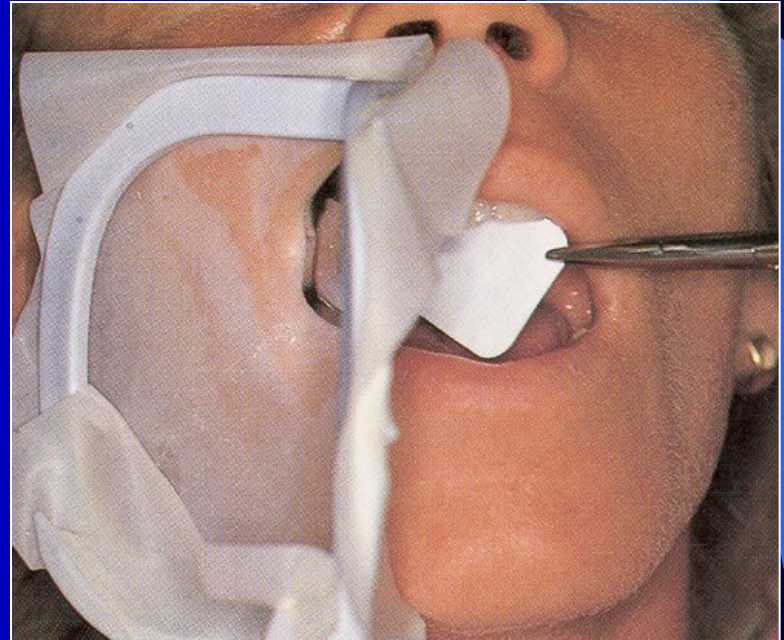


Maintains the rubber dam in position

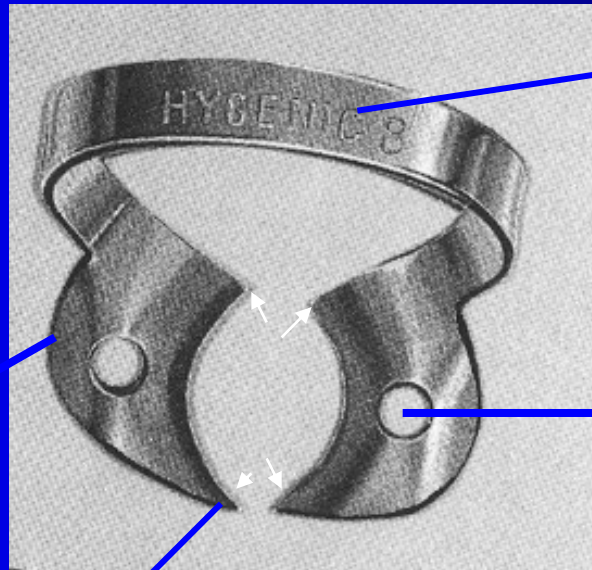
U shaped

Closed

Closed with joint



Rubber dam retainers - clamps



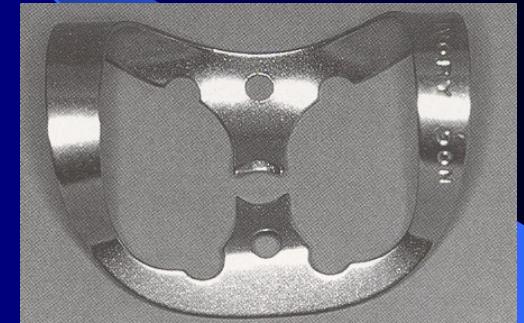
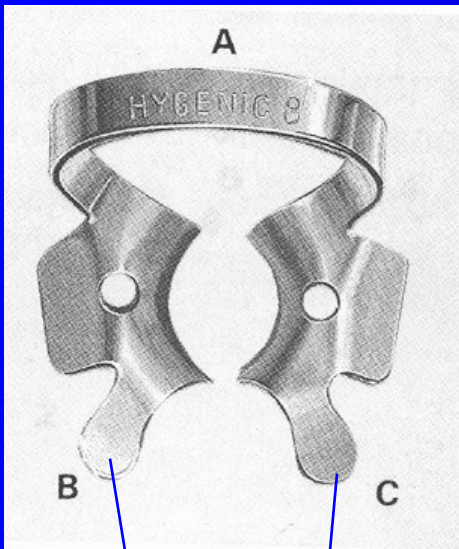
Bow

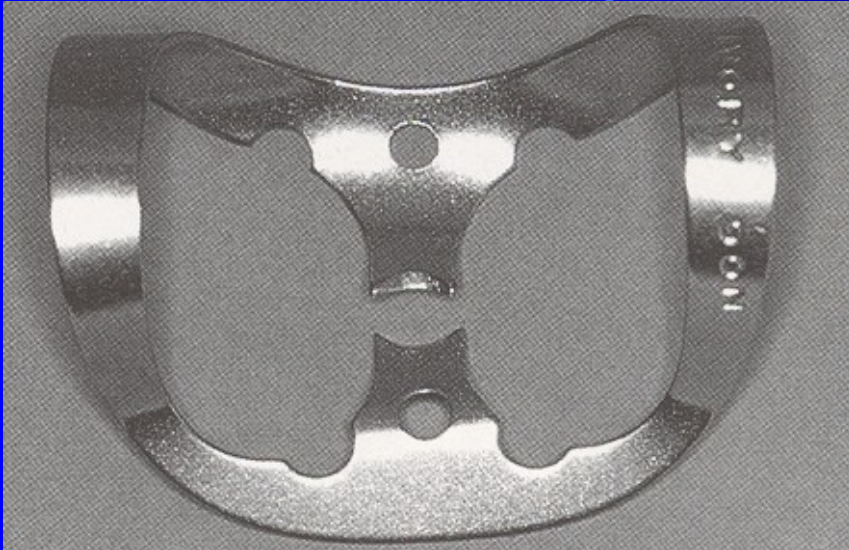
Hole

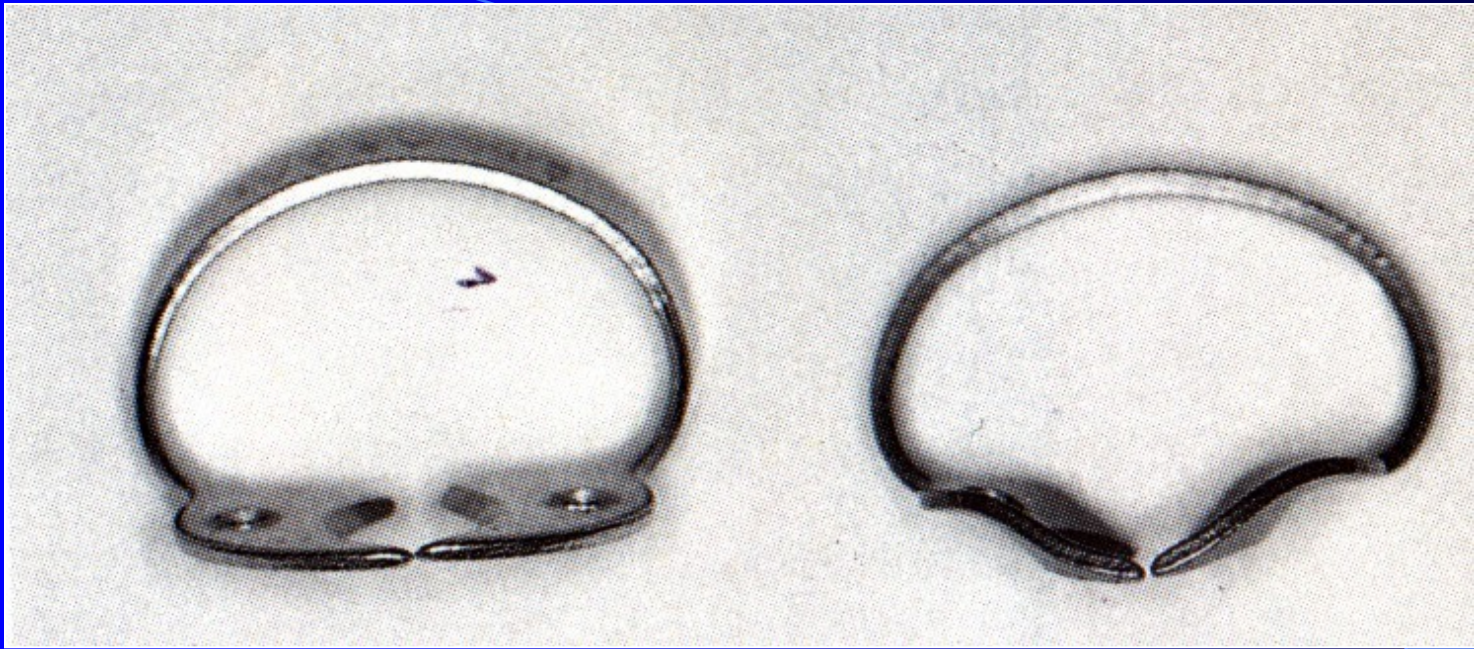
Prong (4 prongs)

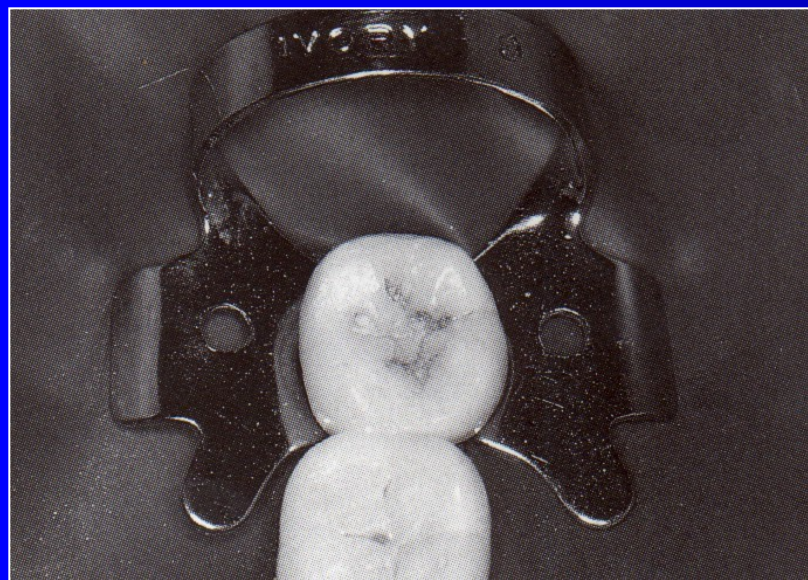
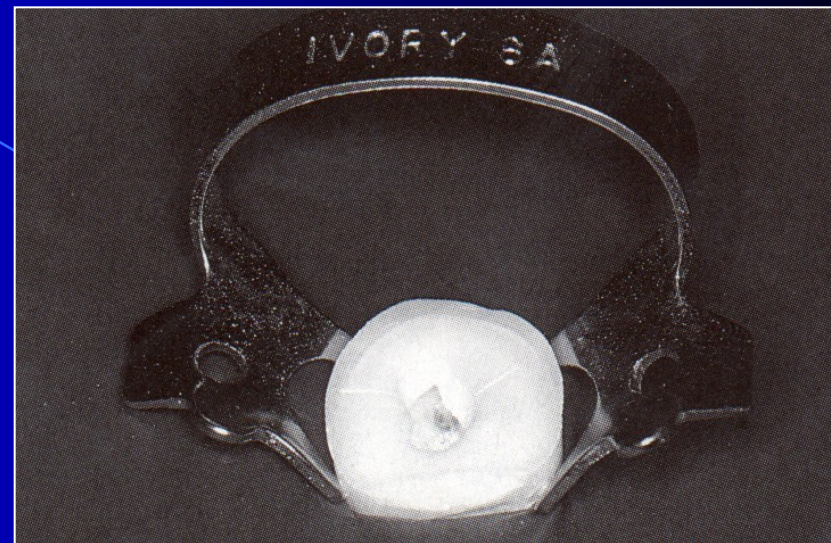
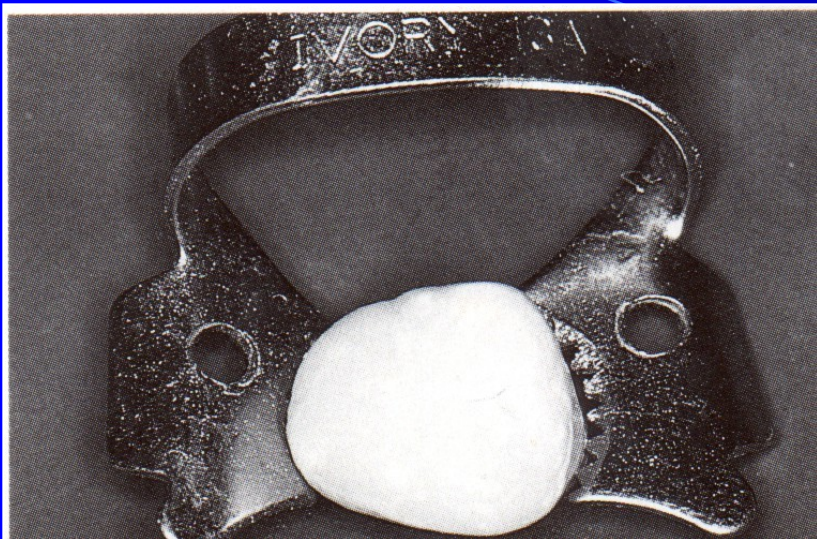
**Anchore the rubber dam
to the most posterior tooth to be isolated**

Wingless and winged retainers

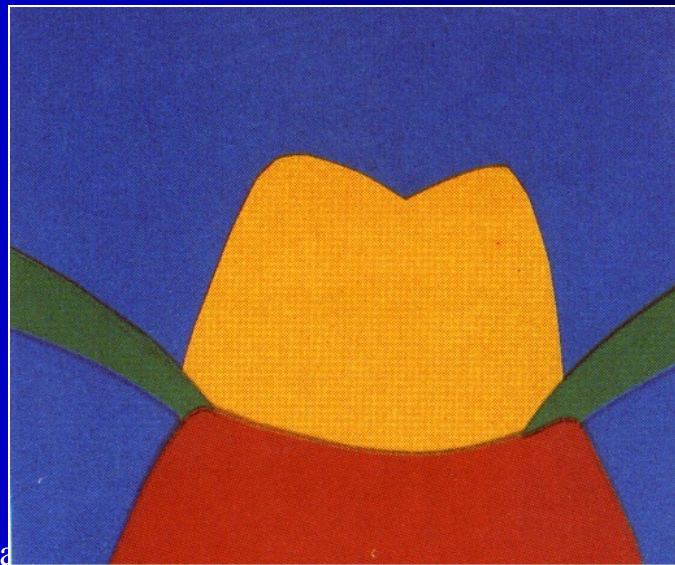
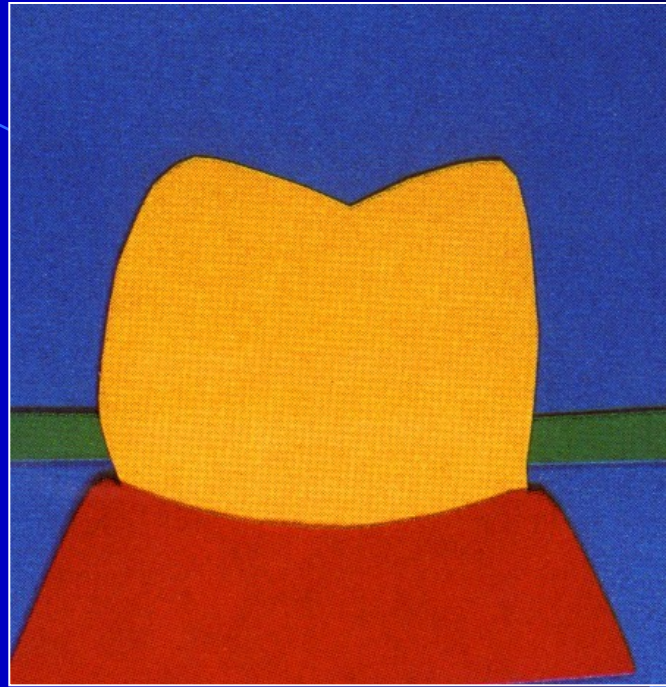
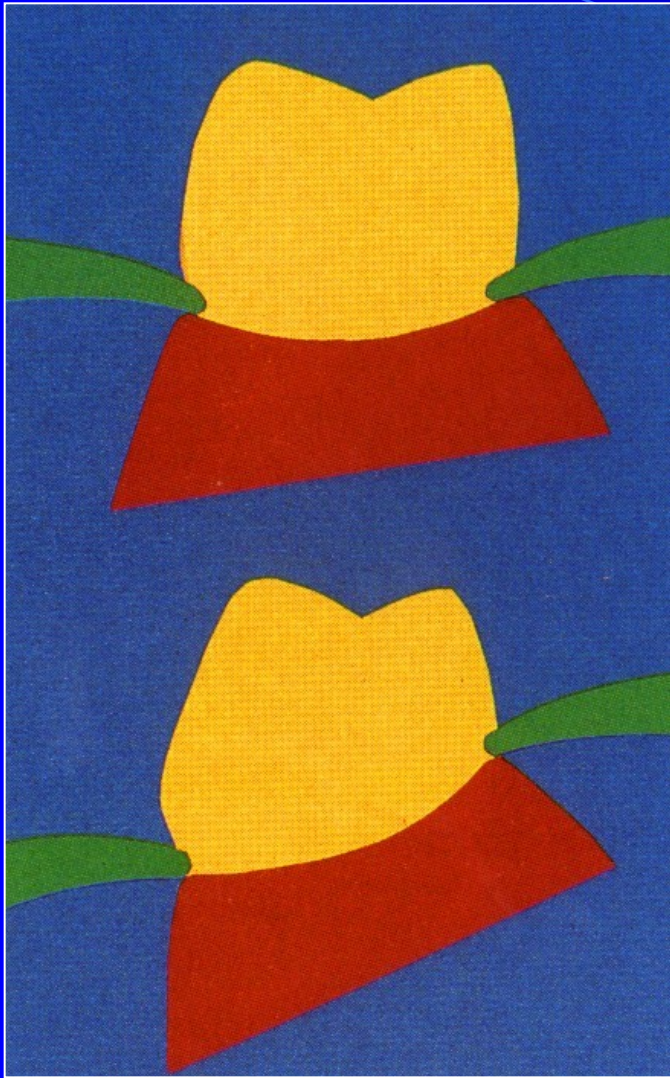




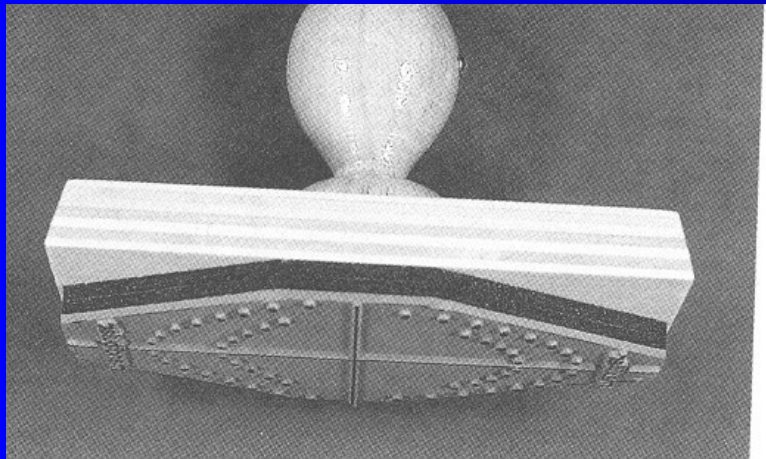
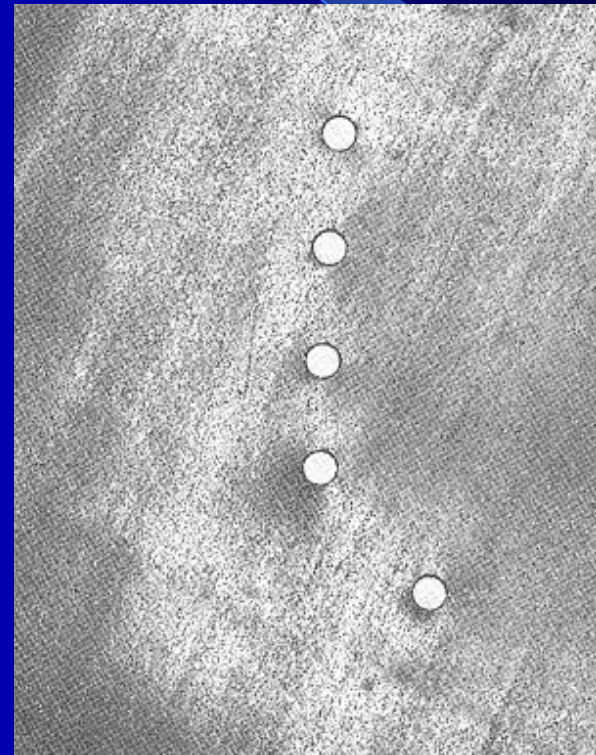
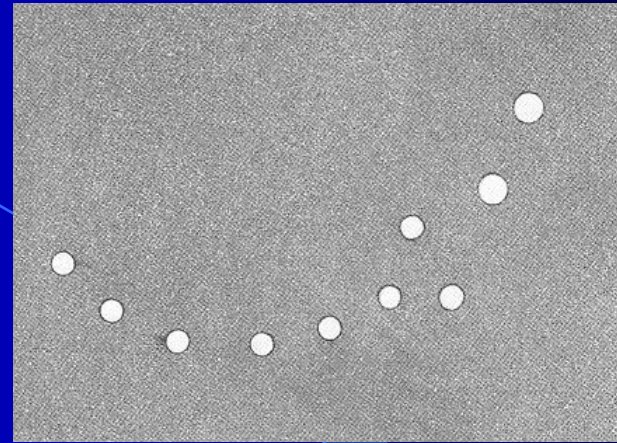




The retainer must not move

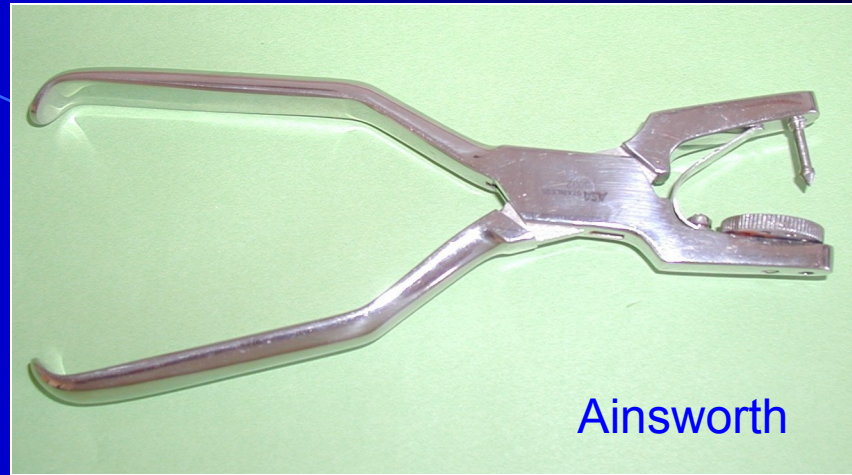


Rubberdam template Rubberdam stamp



Rubber dam punch

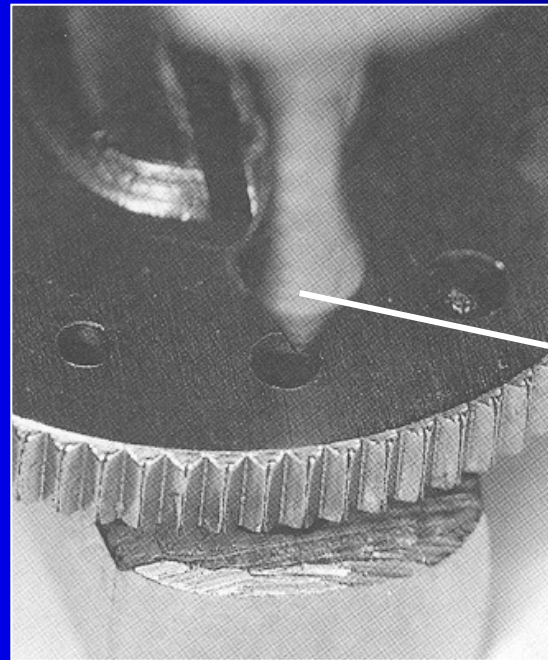
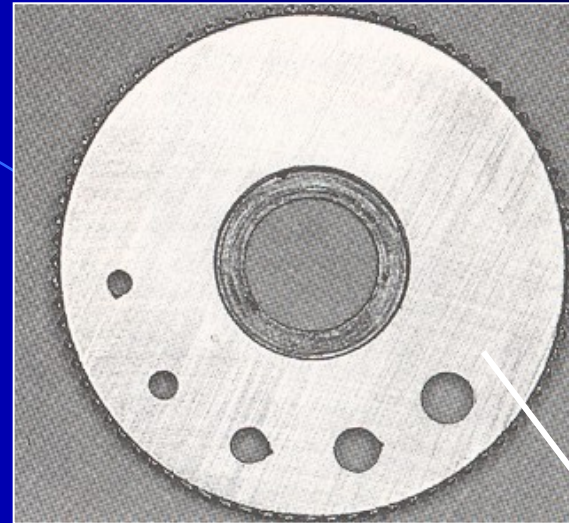
Cuts the puncture
in the rubberdam



Ainsworth



Ivory

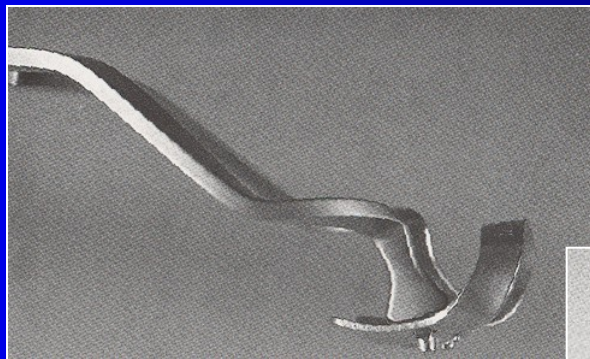
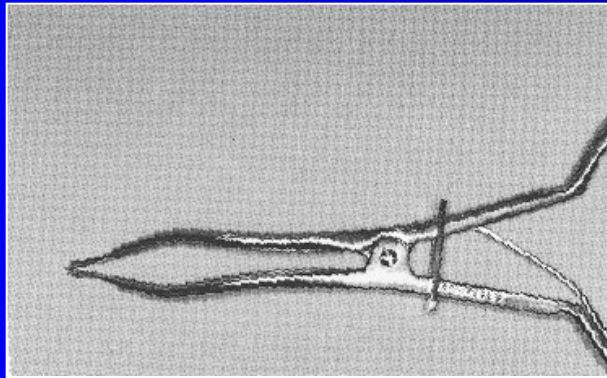
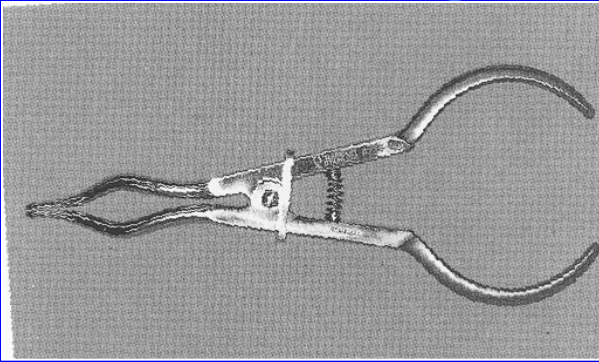


Rotating metal table – disk
Six holes of varying size

Tapered plunger
centered in
the cutting hole

Retainer forceps

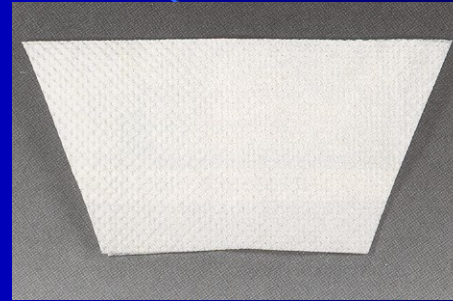
For placement and removal of the retainer



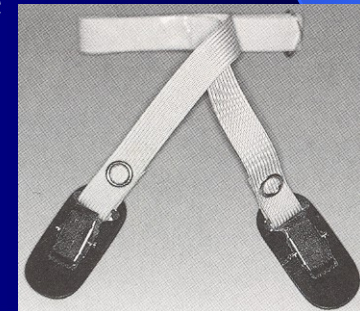
Lubricant



Rubberdam napkin



Neck strape



Perforace blány



**Vyražení otvoru
Okraje okrouhlé bez
nepravidelností**



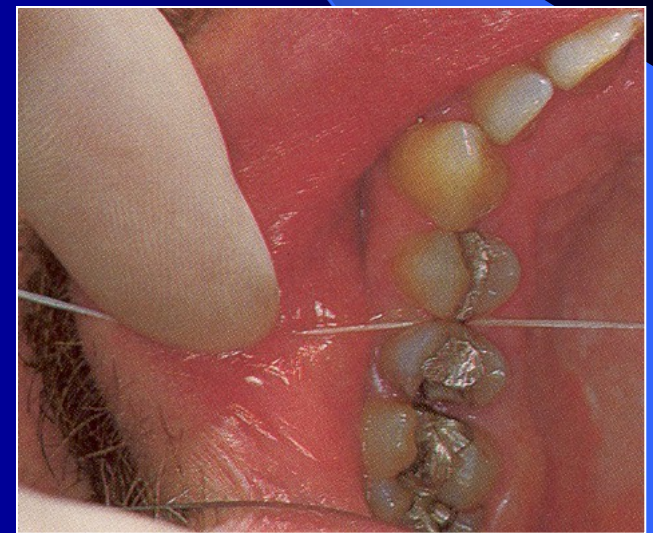


Placement

- **Comfort of the patient and operator**
- **Anaesthesia**
- **Checking of proximal contacts – dental tape**
- **Punching the holes**
- **Lubrication the dam**
- **Selecting the retainer**
- **Testing the stability of the retainer**
- **Positioning of rubberdam**
- **Applying of the napkin**
- **Attaching the frame**

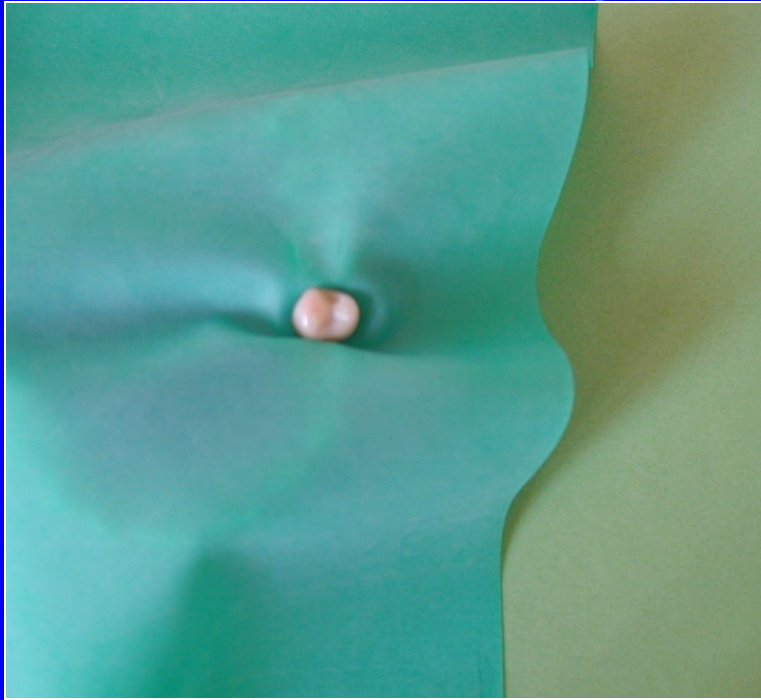
Placement

- **Passing the septa with and without the tape**
- **Inverting the dam interproximally – interdental adaptation**
- **Inverting the dam faciolingually – inversion**
- **Confirming a properly applied rubber dam**
- **Removal of the rubber dam (cut the with scissors)**
- **Removing of the retainer**
- **Wiping the lips**
- **Examining the dam (no remnants)**



Modes of placement

- **Rubber first**



Modes of placement

- **Retainer first**



Modes of placement

- **Rubber and retainer together**

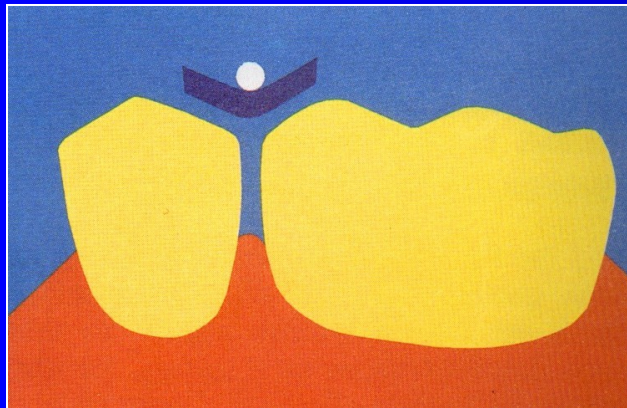
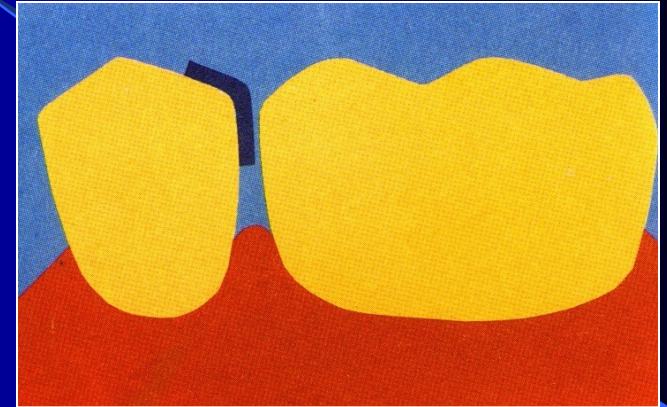
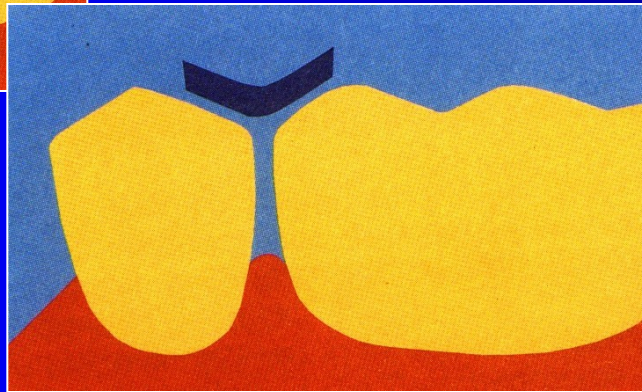
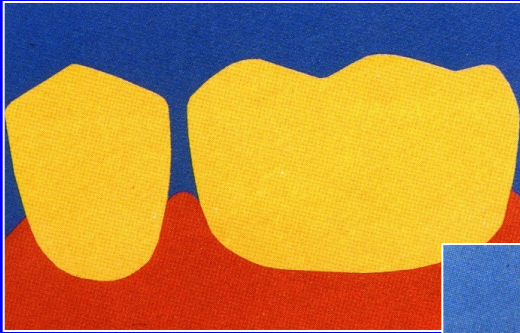


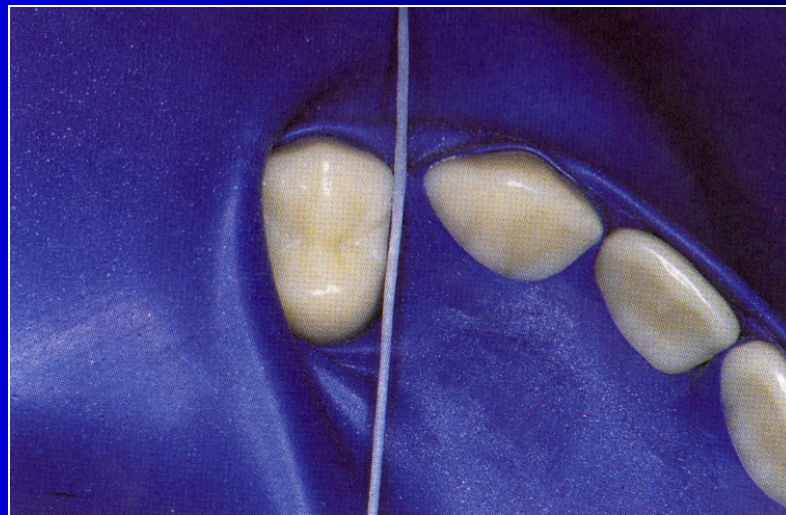
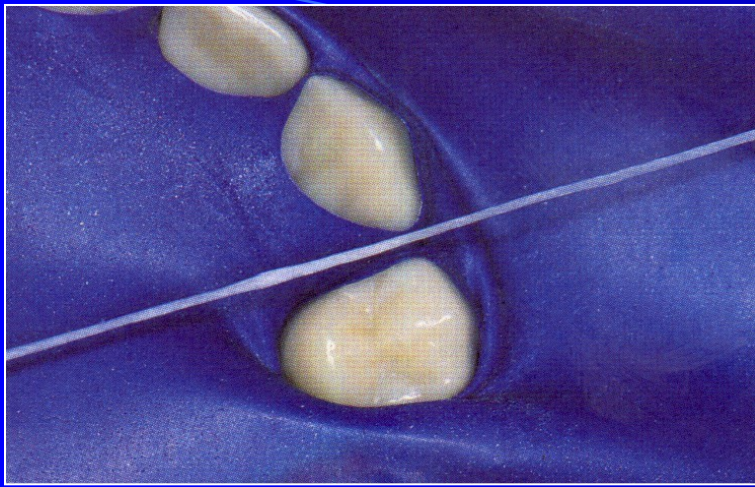
Modes of placement

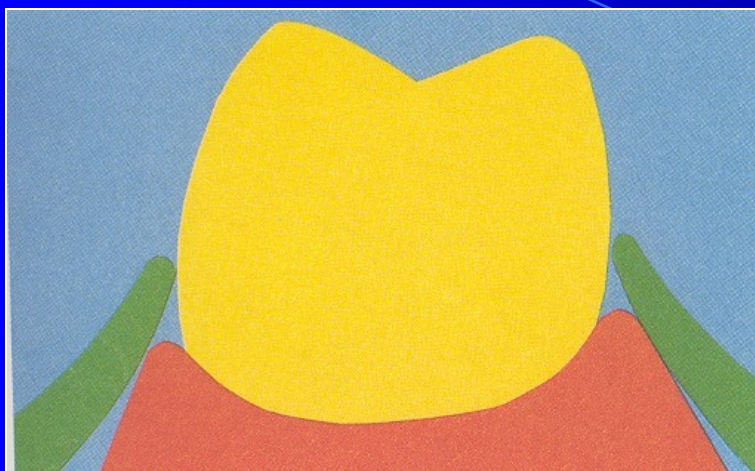
- **„One second placement“**



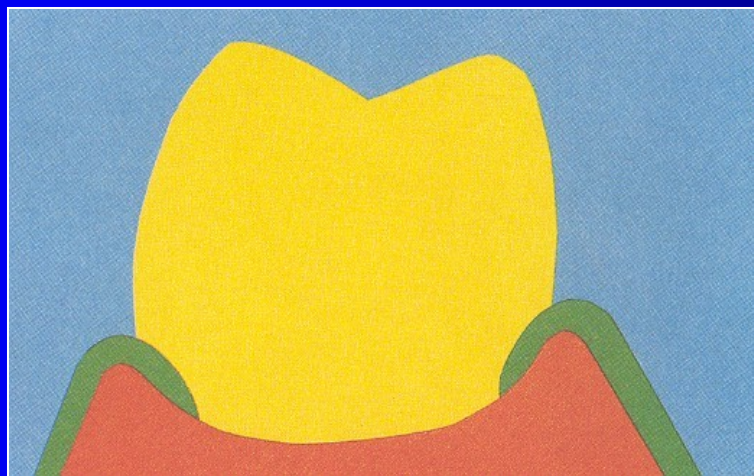
Interdental adaptation – inverting the rubber dam interdentally

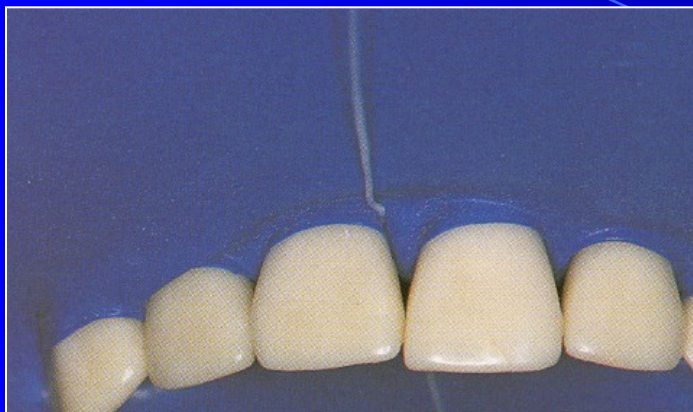


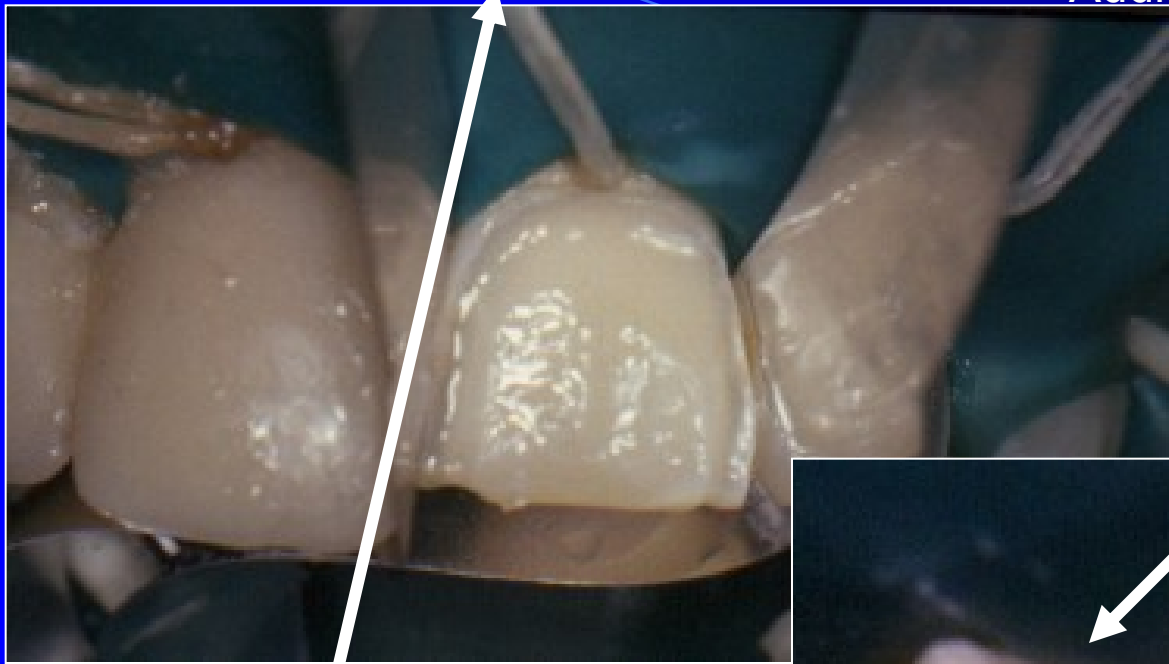




Inverting the rubber dam
faciolingually

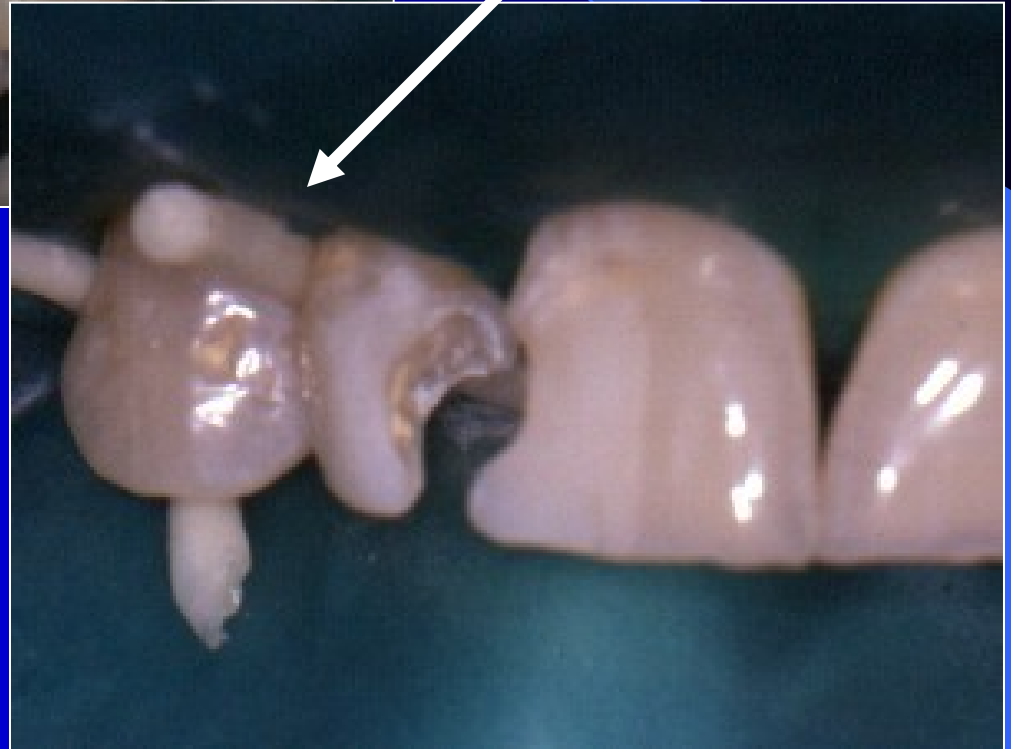


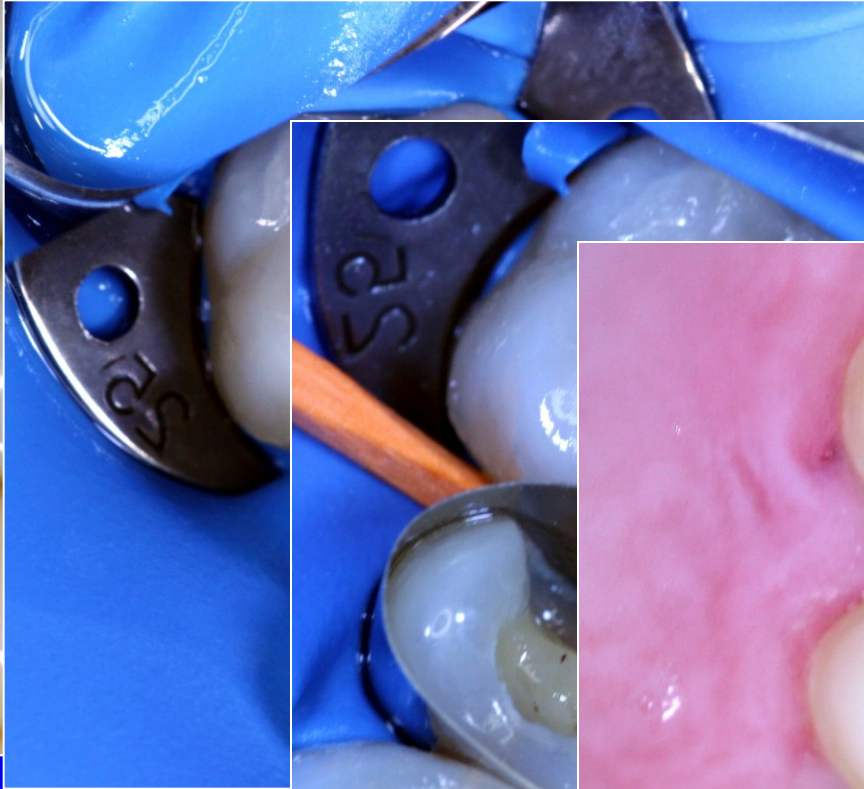
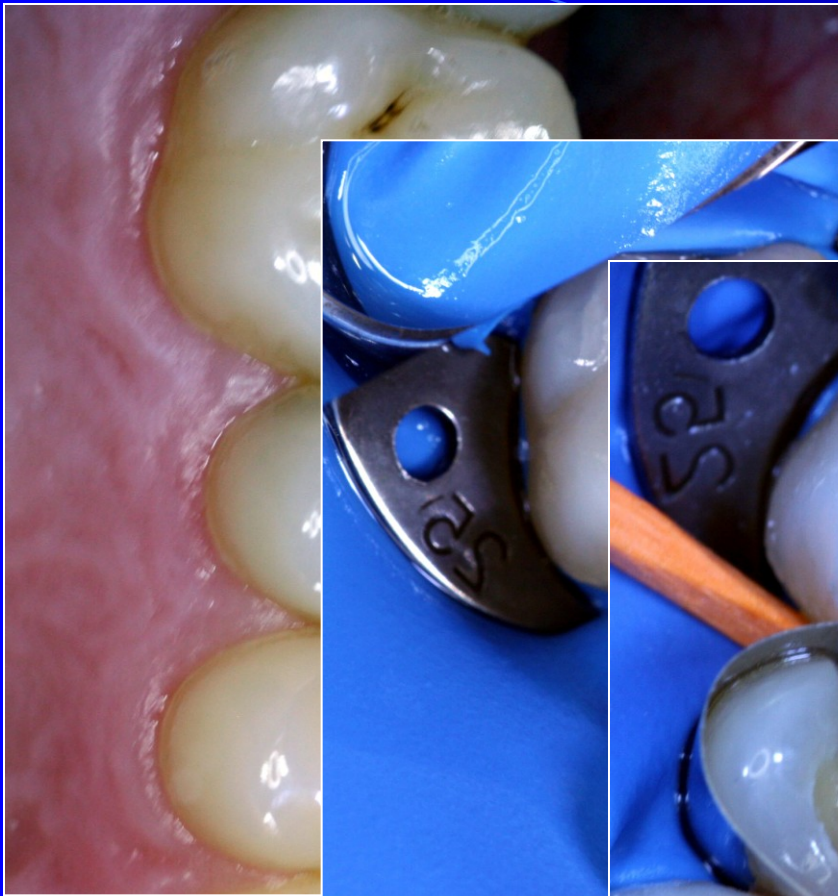




Dentap tape

Wedjet





Modifications

- Optidam
- Optradam
- Minidam
- Dermadam



