

Good Morning



Atraumatic Restorative Treatment



Lesson Plan

Title : Atraumatic Restorative Treatment

Date : 27-01-2021

Duration : 45 Minutes

Target Group : 3rd BDS Students

Teaching Aids Used: - Audio-visual Aids

- Microphone

- Projector

At the end of the lecture

- *What is ART ?*
- *Principles Of ART*
- *Indications and Contraindications*
- *Armamentarium*
- *Procedure*
- *Advantages*
- *Conclusion*

A - Atraumatic



R - Restorative



T - Treatment

“ Minimally invasive care approach in preventing dental caries and stopping its further progression”

- Jo E. Frencken, 2012

Based on

- ☐ *Minimal intervention*
- ☐ *Minimal invasion*
- ☐ *Minimal cavity preparation*

- Pioneered in Tanzania in mid 1980s
- Endorsed by the WHO in 1994.

Principles of ART

(1) Removing carious tooth tissues using hand instruments only



(2) Restoring the cavity with a restorative material that sticks to the tooth

Why only hand instruments?

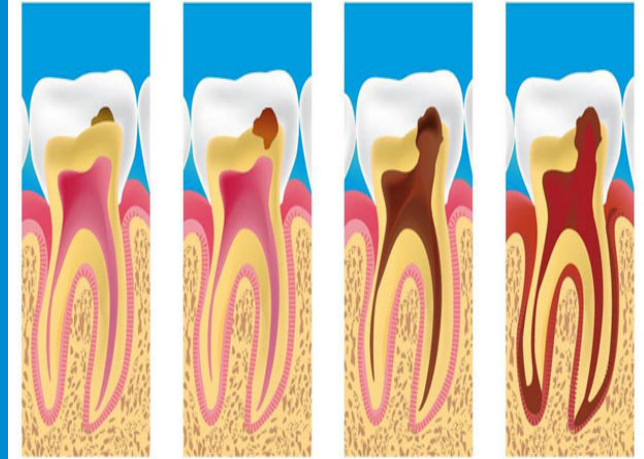
- Minimal cavity preparation □ conserves tooth tissues □ less trauma
- Low cost ...no electrical
- Simple infection control...easy to clean and sterilize
- Less pain □ Less psychological trauma to patients

Why GIC?

- Chemically bonds to enamel and dentin
 - less tooth removal
- Fluoride releasing
- Similar to hard oral tissues
- Non-irritating to pulp or gingiva

Indications

- *Small cavities*
- *Accessible to hand instruments*
- *Public health programs*



Contraindications

- ***Pulpal Disease***
 - Chronic or irreversible pulpitis
 - Pulpal exposure
 - Swelling, abscess, fistula
- ***Inaccessible opening***



Armamentarium

- ✓ Mouth mirror
- ✓ Explorer
- ✓ Tweezer
- ✓ Cotton rolls/pellets
- ✓ Dental hatchet
- ✓ Spoon excavators
- ✓ Dentin Conditioner
- ✓ GIC powder and liquid
- ✓ Mixing pad and spatula
- ✓ Applier/Carver
- ✓ Petroleum jelly



Procedure

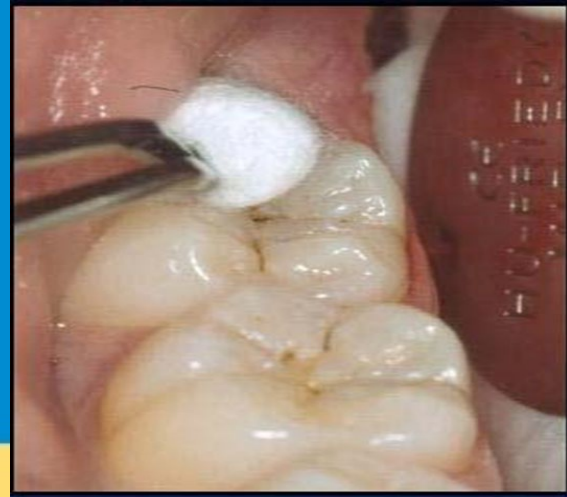
Arrange a good working environment



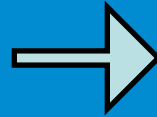
Isolate



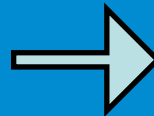
Clean Surface



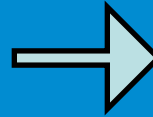
Widen Entrance



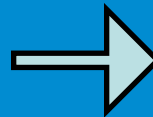
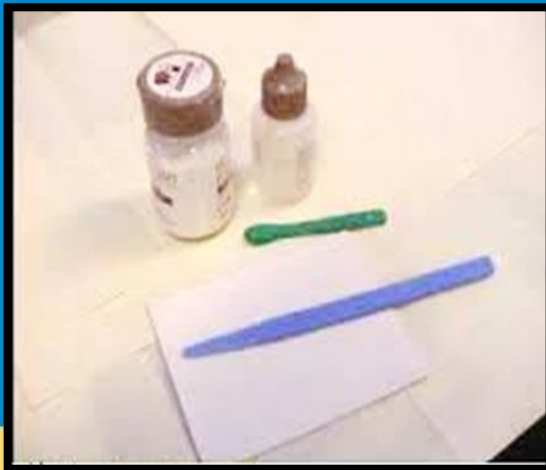
Remove Caries



Condition



Mix Restorative Material



- *Fuji IX (GC America)*



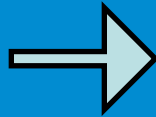
- *Ketac Molar (3M ESPE)*



Press Finger Technique - Place coated gloved finger on occlusal surface and apply light pressure.



Remove Excess Material



Check Occlusion



Instruct patient not to eat for at least an hour



Advantages

1. Biological approach
2. Painless □ less psychological trauma
3. Simple infection control
4. No electric equipment □ inexpensive, remote area
5. Cost effective
6. Simple technique □ Non dental personnel
7. Children, fearful adults, physically and mentally handicapped, elderly.

Conclusion

- Painless biological approach
- Hand instruments and adhesive filling
- Makes restorative care more accessible to all population groups
- Perfect alternative approach for treating dental caries in developing countries.

Questions ??

- *What are the Principles of ART ?*
- *Indications ?*
- *Contraindications ?*

Thank
You