PULP THERAPY IN PRIMARY TEETH

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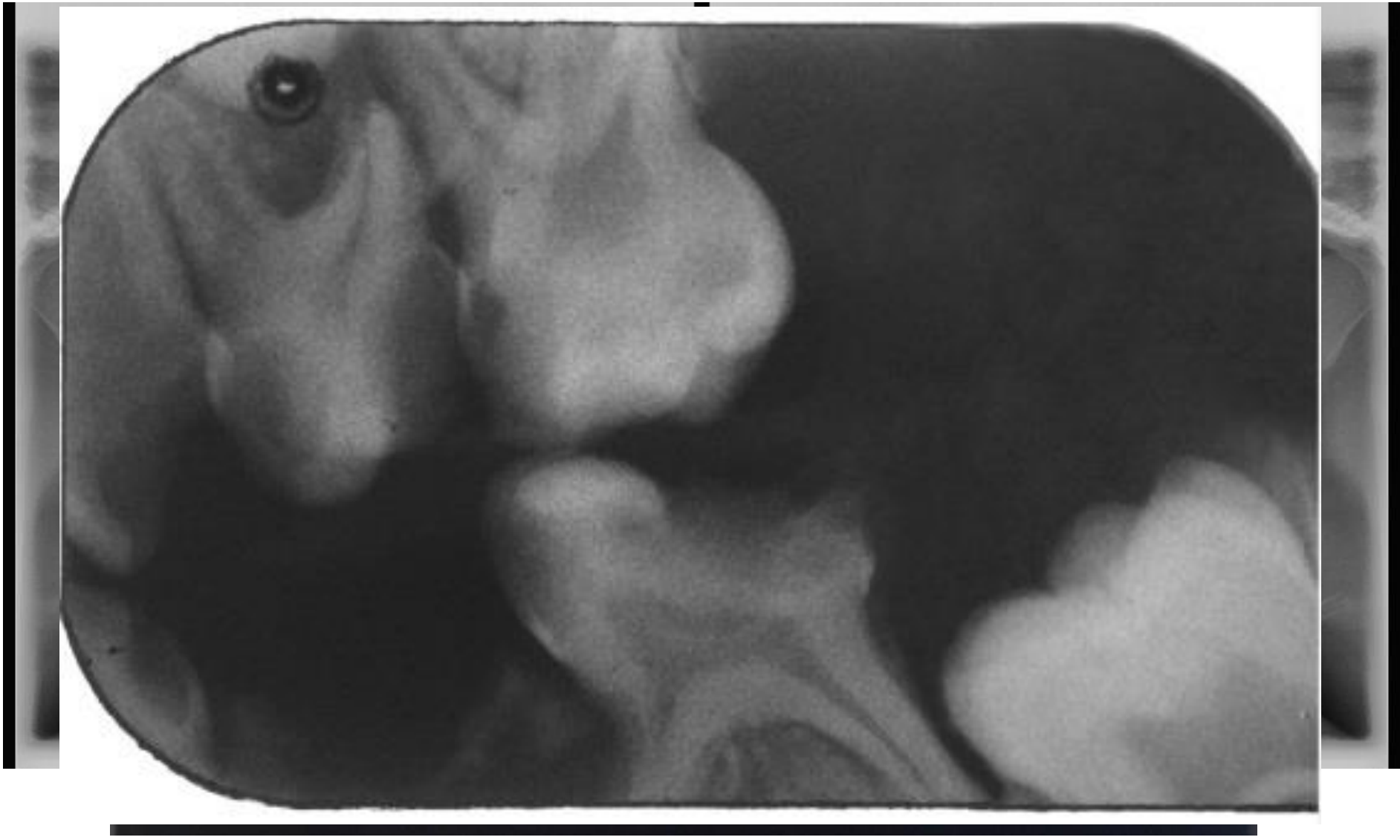
V

RADIOGRAPHIC INTERPRETATION



Pulpotomy

- *PULPOTOMY CAN BE DEFINED AS THE COMPLETE REMOVAL OF CORONAL PORTION OF THE DENTAL PULP , FOLLOWED BY PLACEMENT OF SUITABLE DRESSING OR MEDICAMENT THAT WILL PROMOTE HEALING & PRESERVE VITALITY OF THE TOOTH*

INDICATION-:

- *Cariously exposed primary teeth, when their retention is more advantageous than extraction.*
- *Vital tooth with healthy periodontium*
- *Pain, if present not spontaneous nor persists after removal of the stimulus*
- *Tooth which is restorable*
- *Tooth with-2/3rd root length*
- *Hemorrhage from the amputation site is pale red & easy to control*
- *In mixed dentition stage primary tooth is preferable to a space maintainer*

FIGURE 2A- Preoperative periapical radiograph of the mandibular left primary molars of a 6-year old girl, which presented extensive caries lesions, two thirds or more of root length, and no signs of periapical lesion. Agenesis of the mandibular left permanent second premolar was observed

CONTRAINDICATION -:

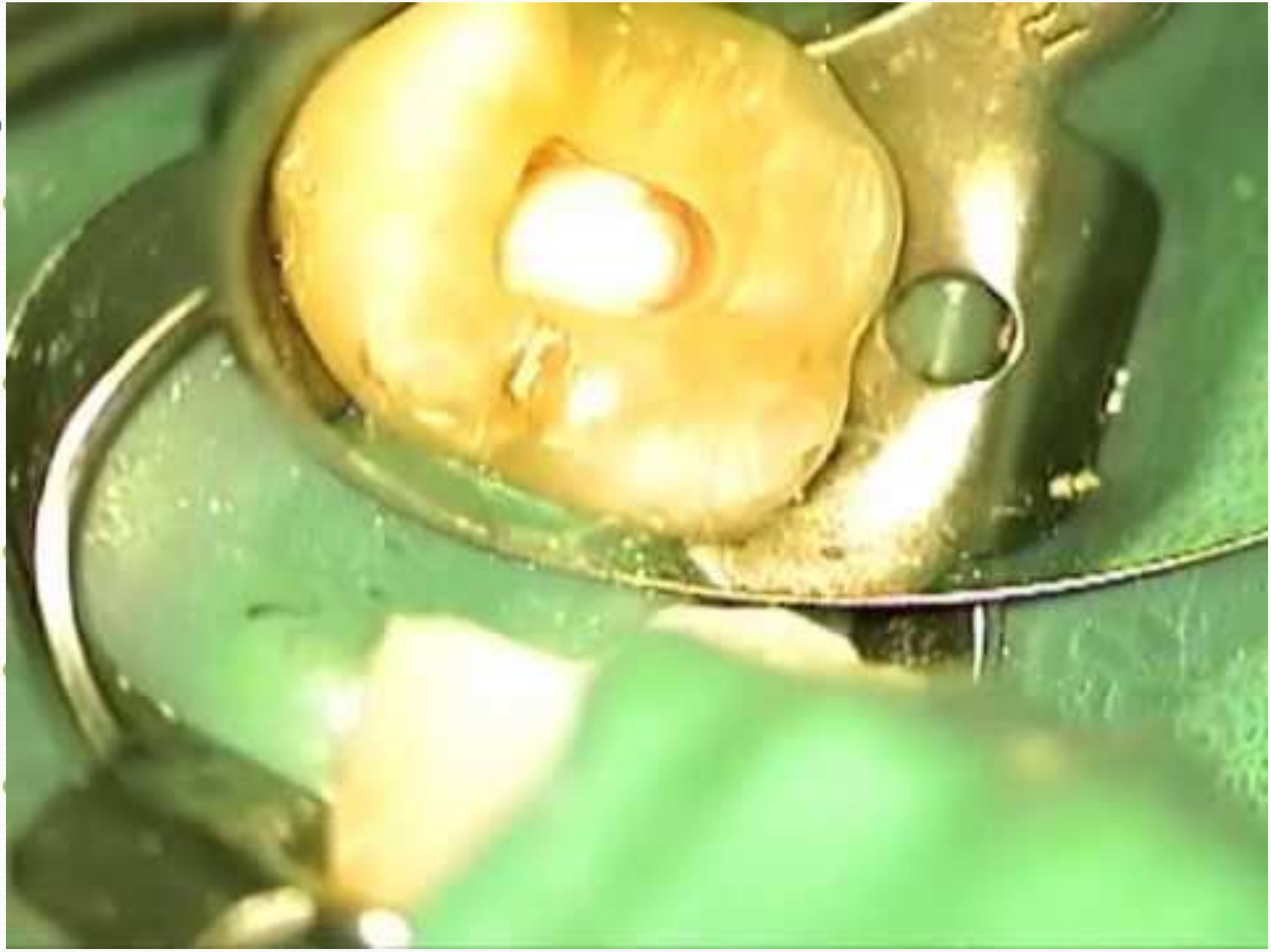
- Evidence of internal resorption
- Presence of inter radicular bone loss
- Abscess , fistula in relation to teeth
- Radiographic sign of calcific globules in pulp chamber
- Caries penetrating the floor of pulp chamber
- Tooth close to natural exfoliation

TREATMENT OBJECTIVES-:

- *>Amputate the infected coronal pulp,*
- *>Neutralize any residual infectious process,*
- *>Preserve the vitality of the radicular pulp.*
- *>Avoid breakdown of periradicular area*
- *>Treat remaining pulp with medicament*
- *>Avoid dystrophic pulpal changes*

TECHNIQUE FOR PULPTOMY OF THE PRIMARY TEETH

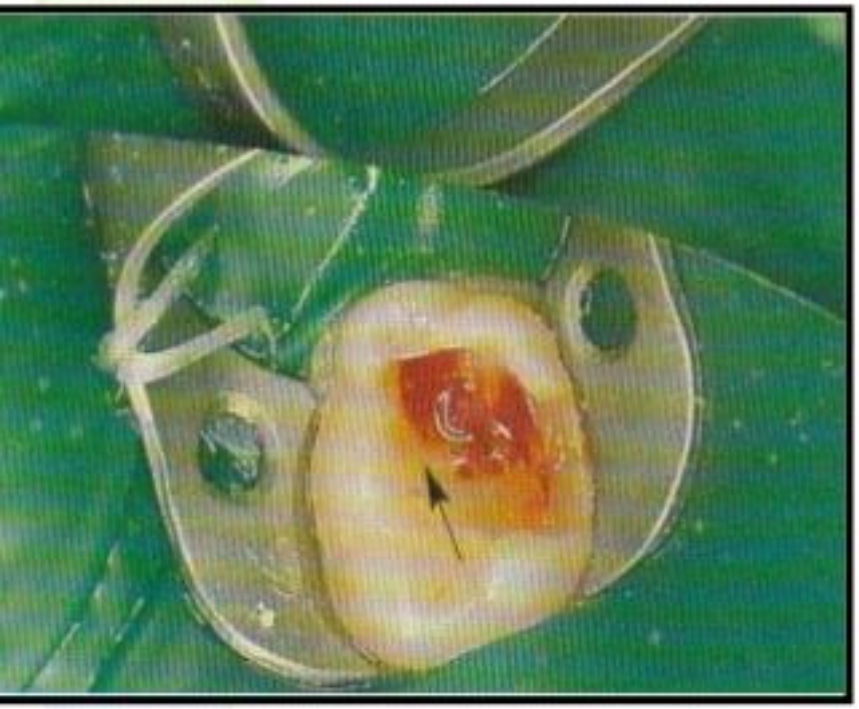
- *1. Profound anaesthesia for tooth and tissue.*
- *2. Isolate the tooth to be treated with a rubber dam.*
- *3. Excavate all caries.*
- *4. Remove the dentin roof of the pulp chamber.*
- *5. Remove all coronal pulp tissue with a slow-speed No. 6 or 8 round bur or sharp spoon excavator*



PROCEDURE

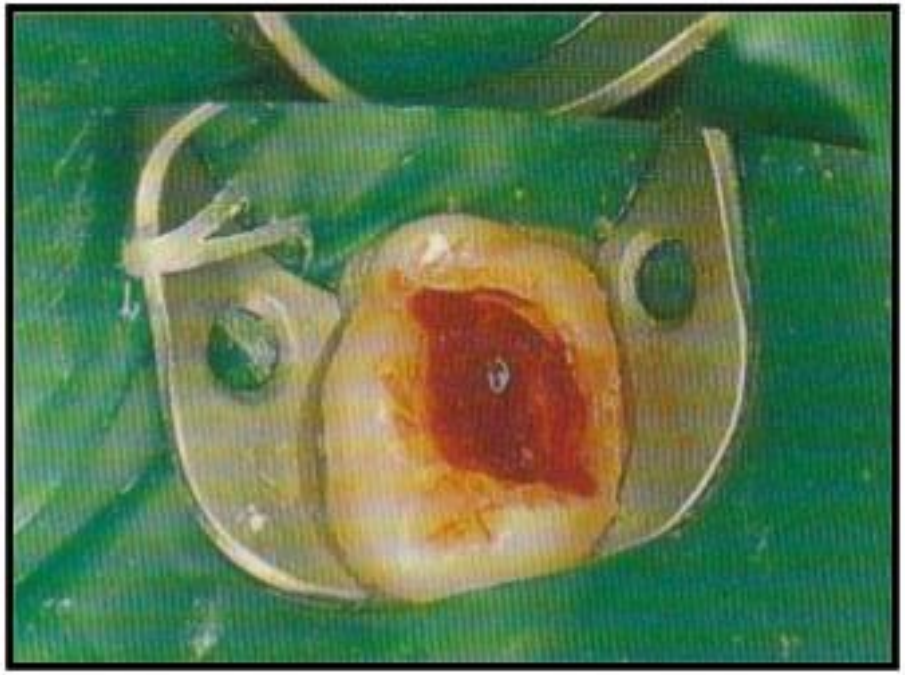
Anesthetize the tooth and tissue.

Isolate the tooth with rubber dam

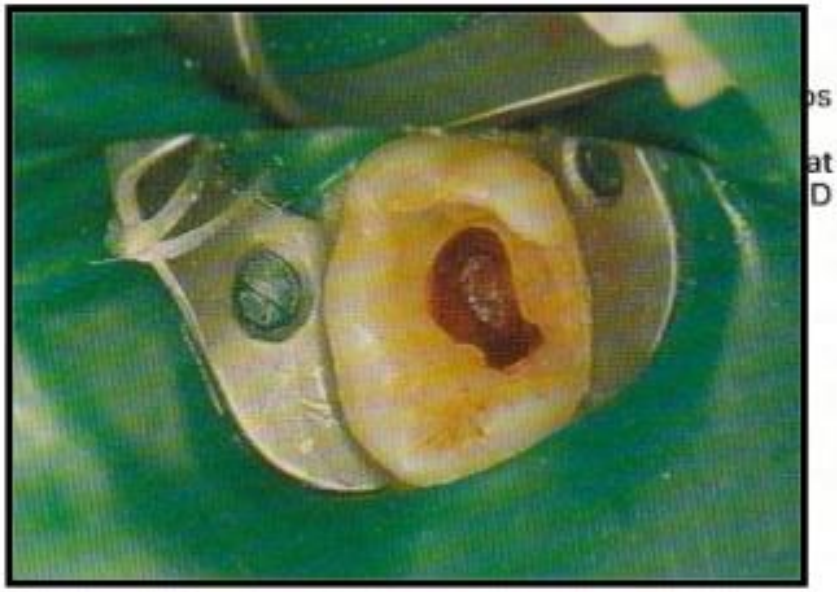


Remove caries & determine site of pulp exposure

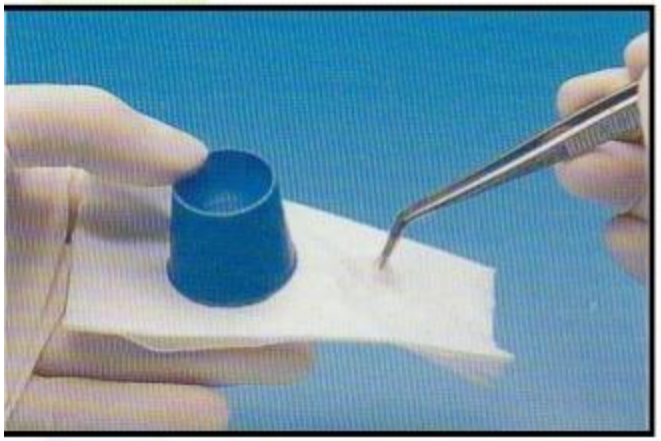
Remove roof of pulp chamber

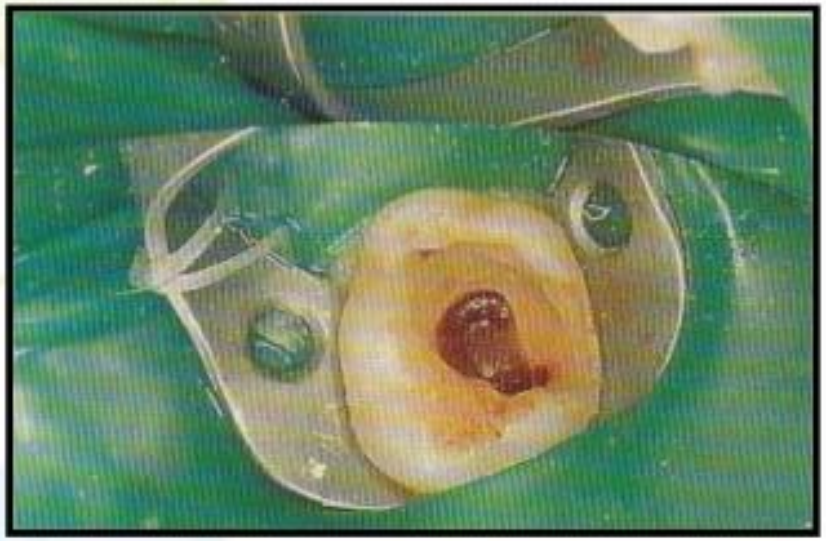


Remove coronal pulp with a large excavator or a large round bur



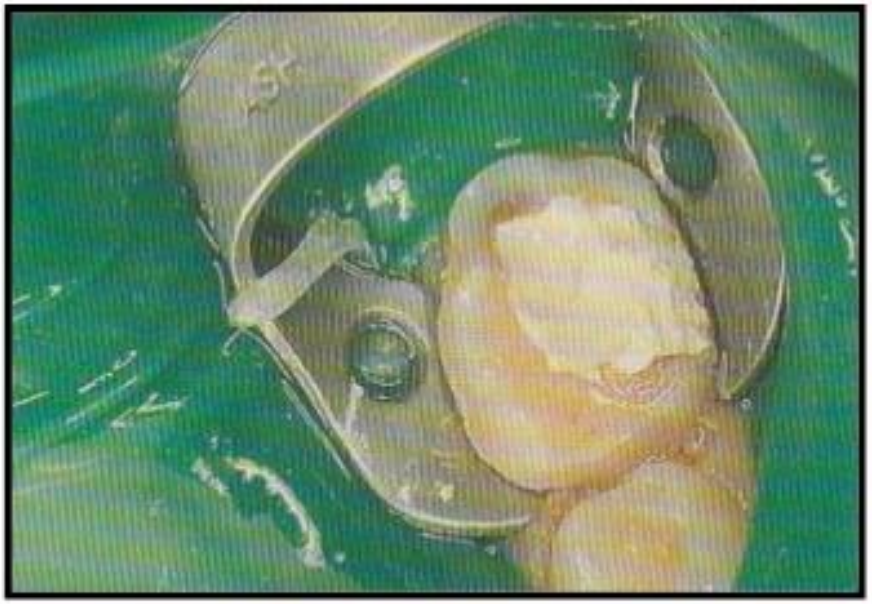
Apply formocresol on the pledge of cotton wool for 4 minute



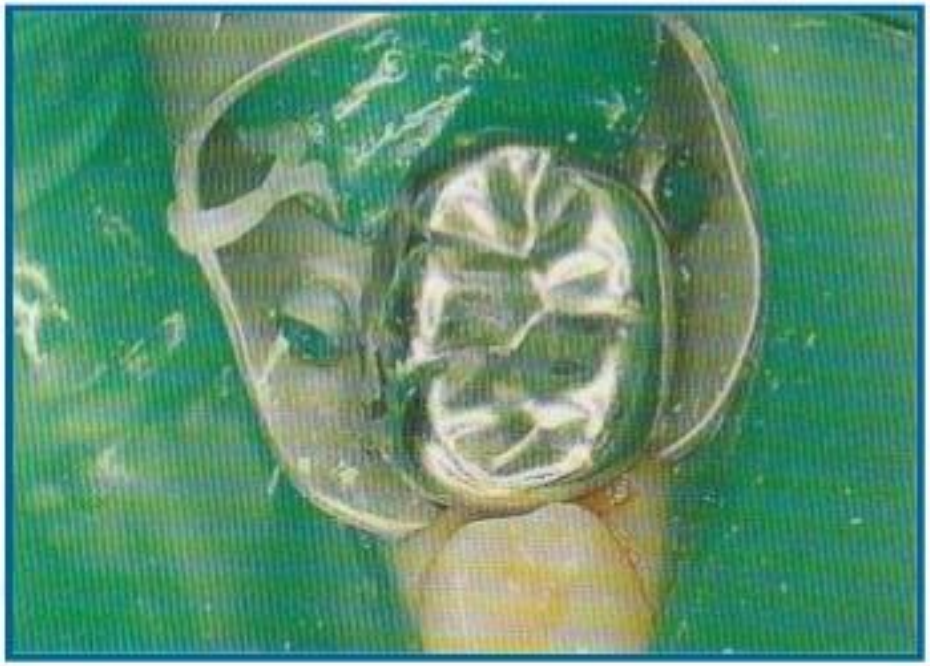


Remove formocresol pledget after 4 min. & check that haemorrhage has stopped

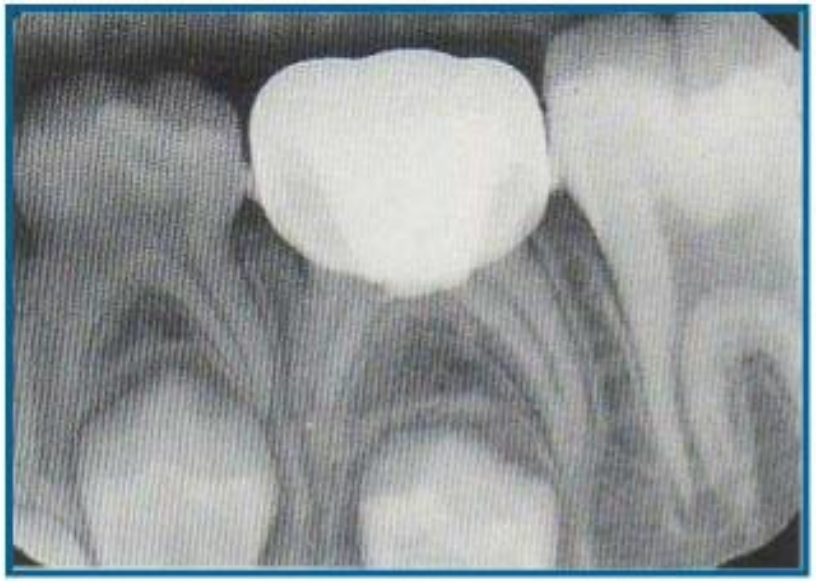
Fill pulp chamber with cement

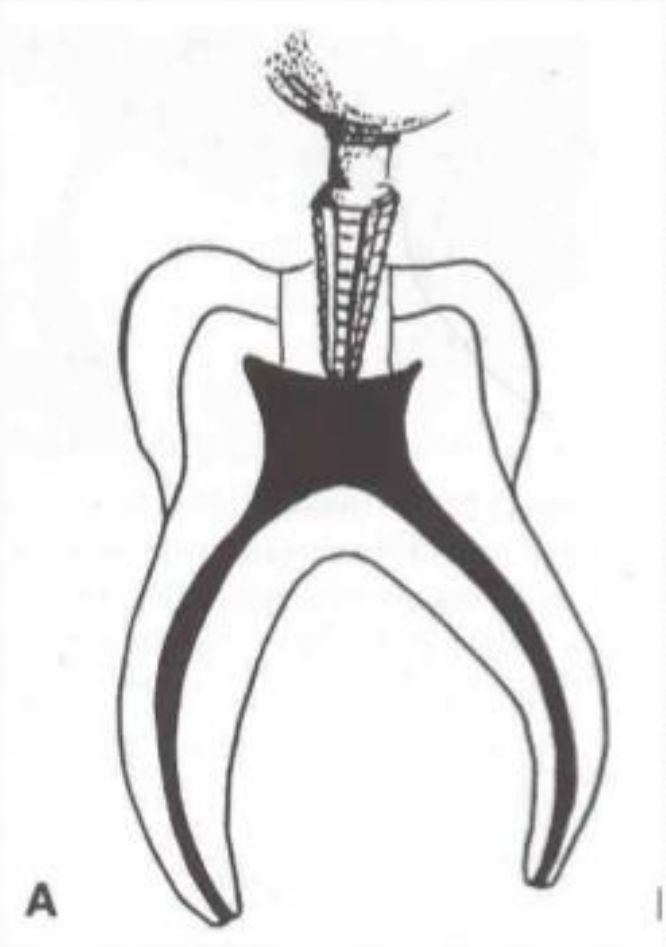


Restore the tooth with stainless steel crown



Take a post operative photograph

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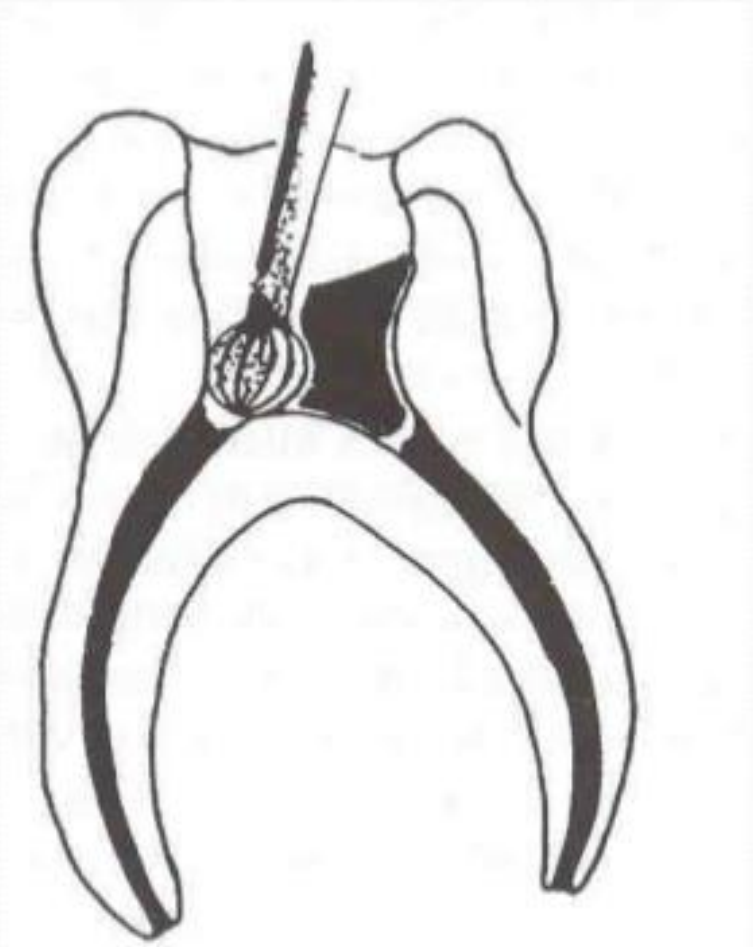
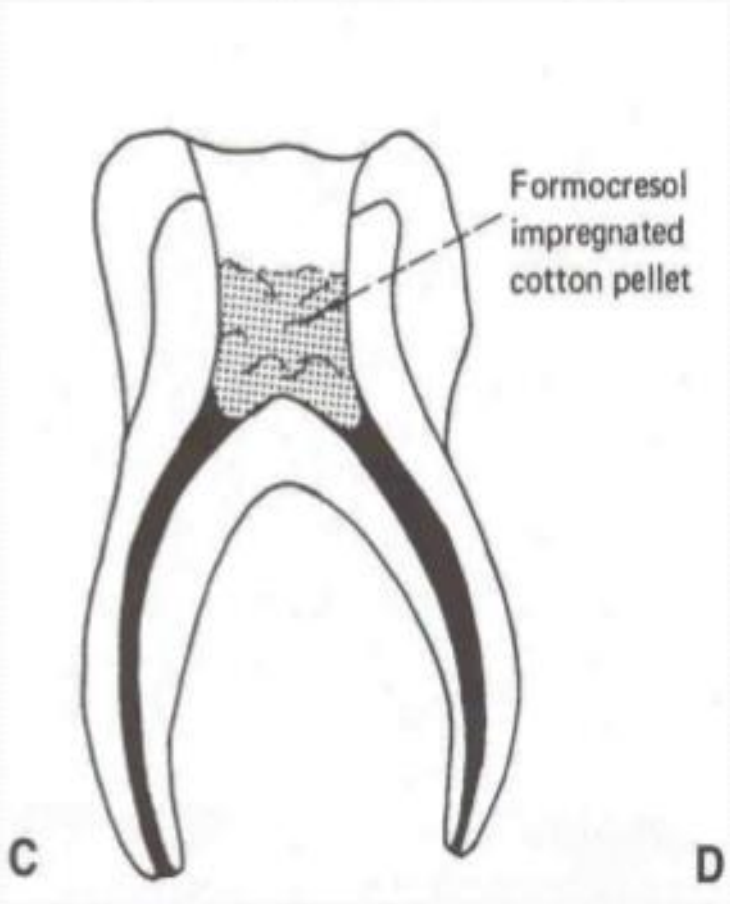



Formocresol
impregnated
cotton pellet
C

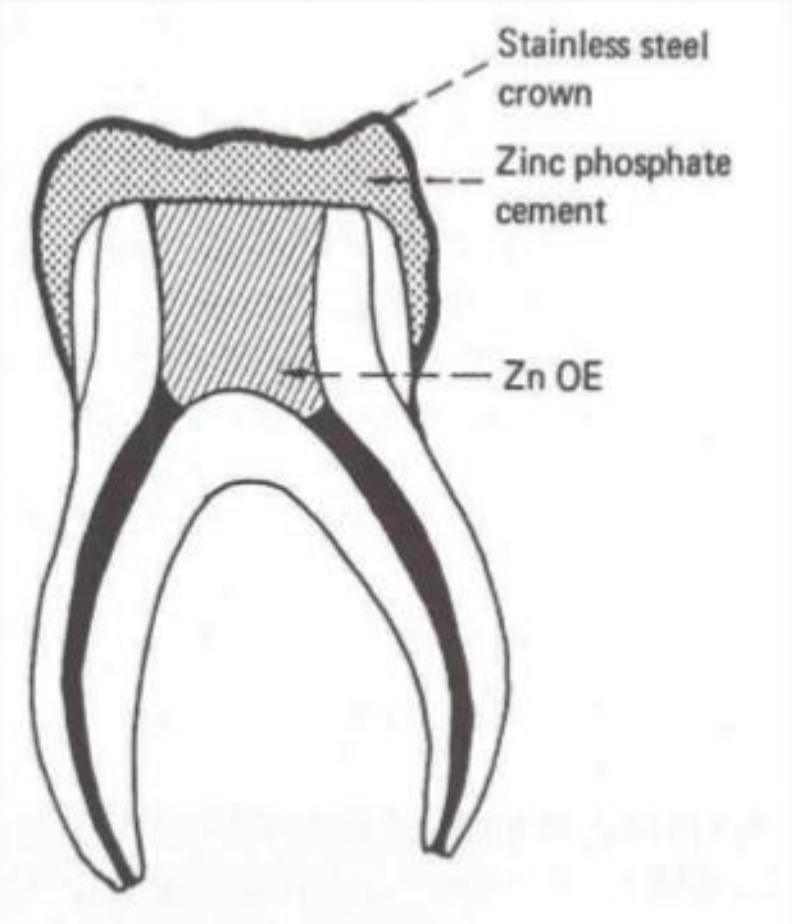

Stainless steel
crown
Zinc phosphate
cement
Zn OE
D

FIGURE 2B- 3-month follow-up periapical radiograph suggesting the initial formation of a dentin bridge immediately below the Portland cement in the distal root (arrow) of the pulpotomized mandibular left second molar and absence of periapical lesion in both pulpotomized mandibular left primary molars

PULPECTOMY

Complete removal of necrotic pulp tissue from the root canals and coronal portion of devital primary teeth to maintain the tooth in the dental arch

Justification

1. Removal of diseased tissue
2. Space management

OBJECTIVES OF PULPECTOMY

1. Following the treatment , the infectious process should resolve

2. There should be radiographic evidence of successful filling without gross overextension or underfilling

3. The treatment should permit resorption of the primary root structures at the appropriate time to permit normal eruption of succedaneous tooth

4. No radiographic evidence of further breakdown of supporting tissues

5. Should prevent further pain and swelling

6. No internal or external resorption or other pathology

Indications

1. Strategically important tooth
   (in case of the deciduous second molar where the permanent first molar has not erupted)

2. Irreversible pulpits

3. Minimal periapical changes with sufficient bone support

4. At least 2/3rd of the root length available

5. Internal resorption without any obvious perforation

CONTRAINDICATIONS

1. Excessively mobile and/or reduced bone support

2. Non restorable tooth

3. Internal resorption of the pulp chamber and root canal

4. Underlying dentigerous or follicular cyst

5. Pathology extending to the developing permanent tooth bud

6. Less than2/3rd of root length remaining

7. Perforation of pulpal floor

8. Medically compromised children

The procedure of pulpectomy can be performed in :--

1. Single-visit
2. Multi-visit

Single-visit → Partially vital pulp

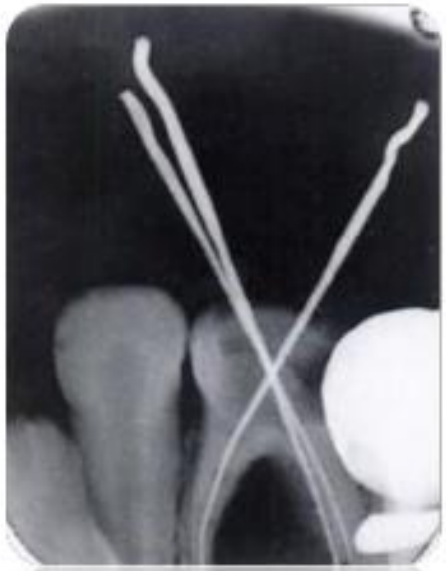
Multi-visit → Non-vital pulp

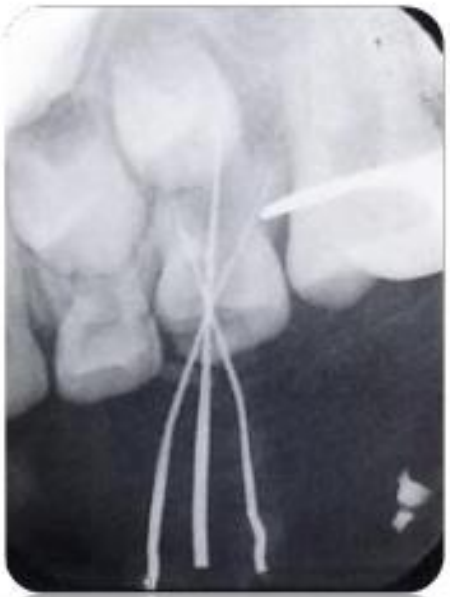
STEP 1 . Give local anaesthesia and isolate the tooth with rubber dam

STEP 2 : Remove caries and identify the exposure site

STEP 3 : Remove roof of pulp chamber and identify opening of root canals

STEP 4 : Take diagnostic radiograph





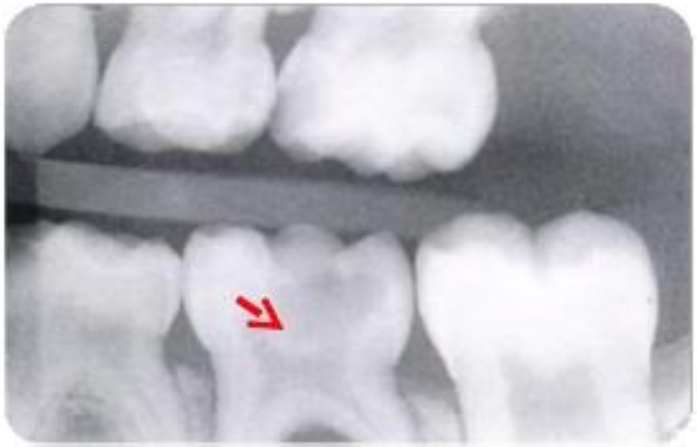
STEP 5 : Clean out root canals with hedstroem files and remove remnants of pulp tissue and irrigate the canal

STEP 6 : Dry root canal with paper points and place a pledget of formocresol in the pulp chamber for 4 minutes

STEP 7 :Select a spiral root canal filler of appropriate size

STEP 8 : mix zinc oxide eugenol as a slurry and spin it into the root canals Using the spiral root canal filler

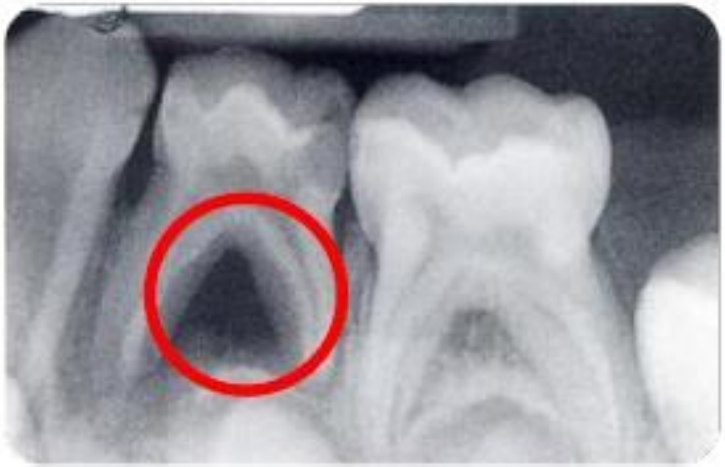
Preoperative



Immediately post operative

3 Months later

Preoperative



After 6 months

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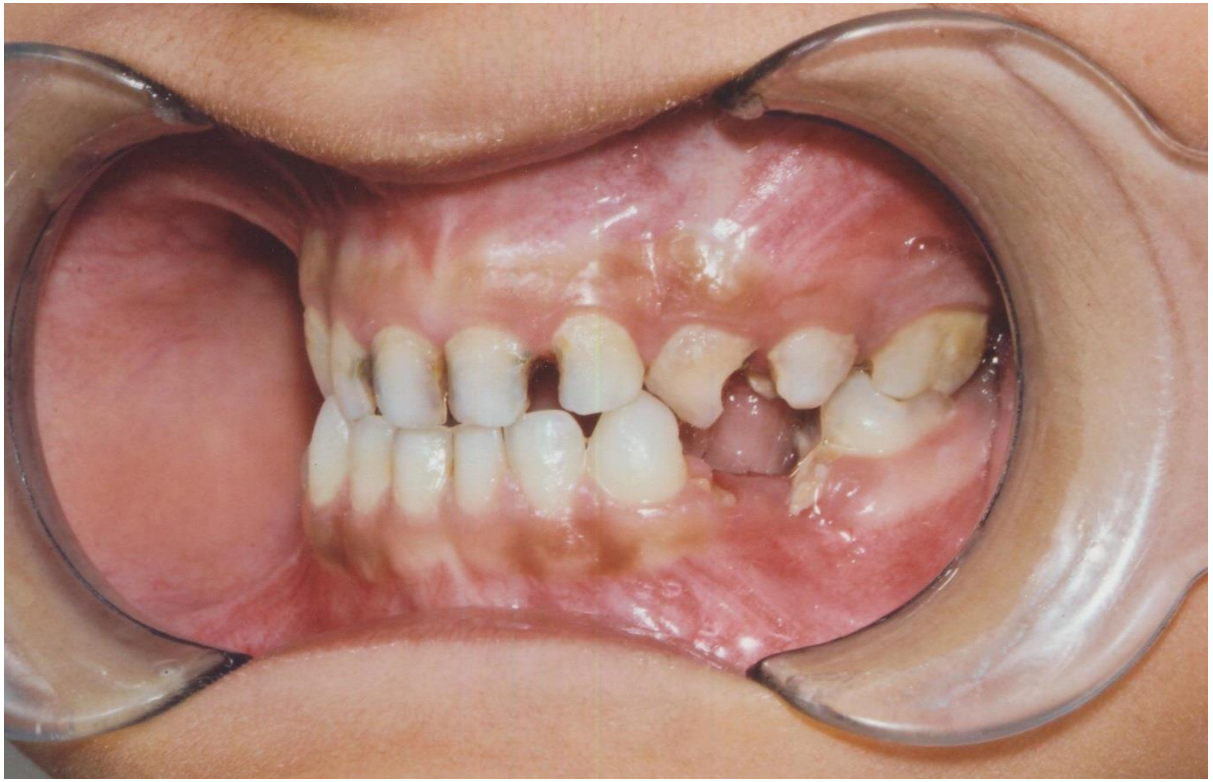

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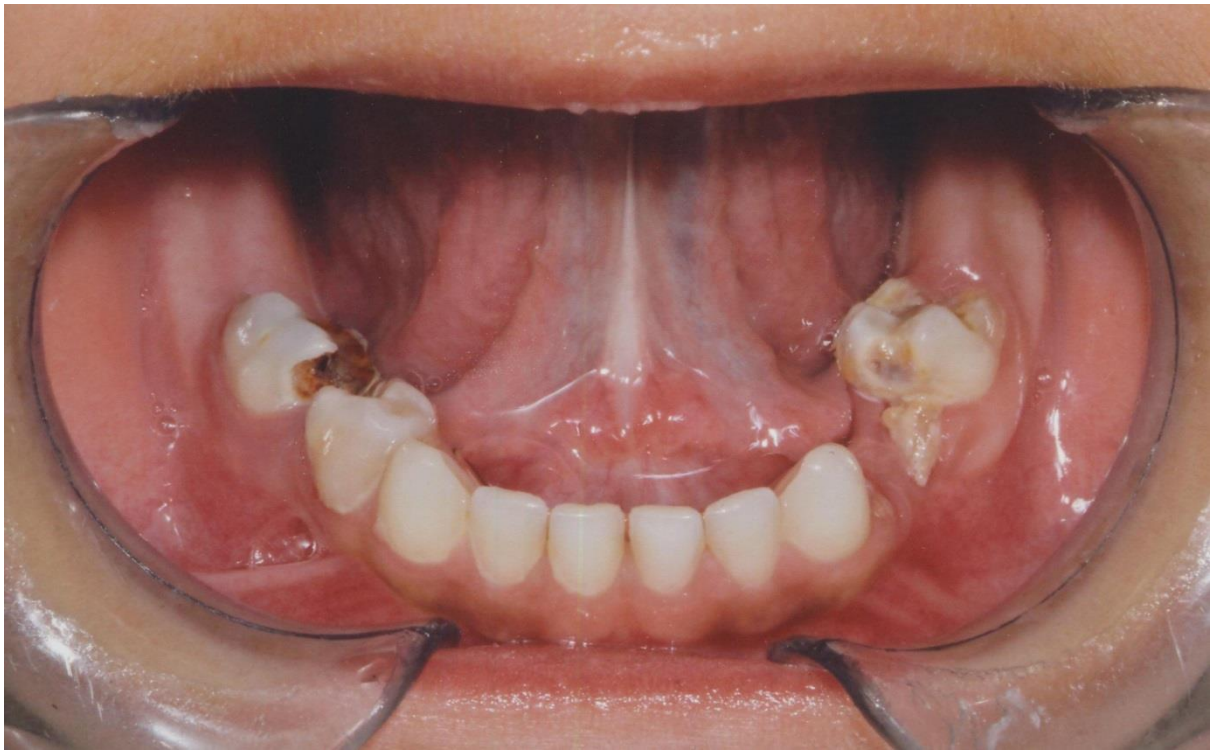

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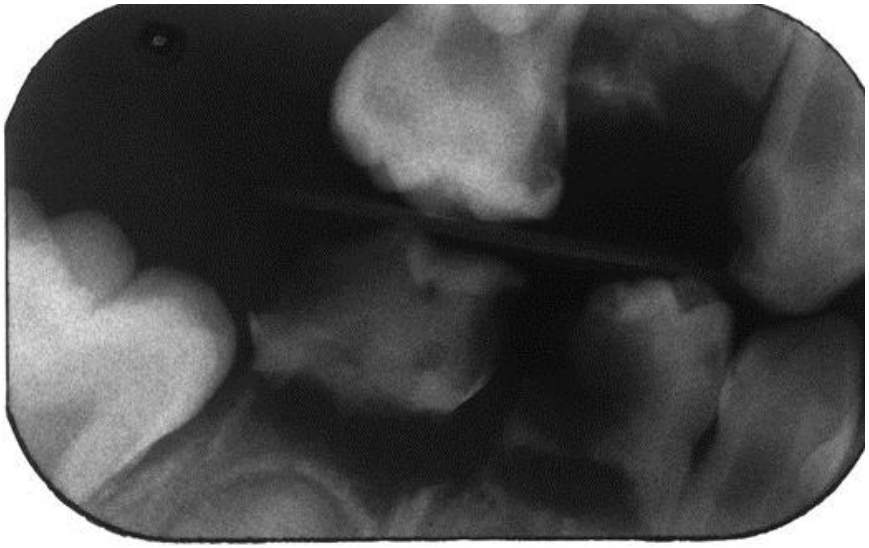

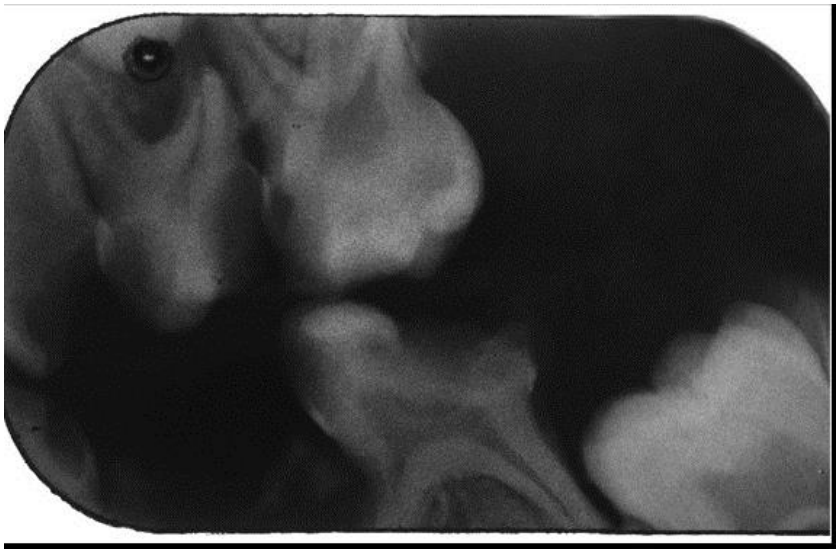

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پری اپیکال قدامی

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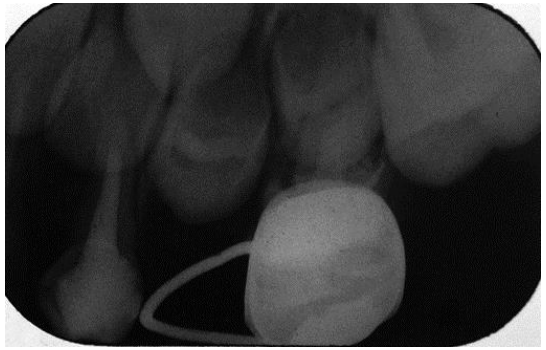
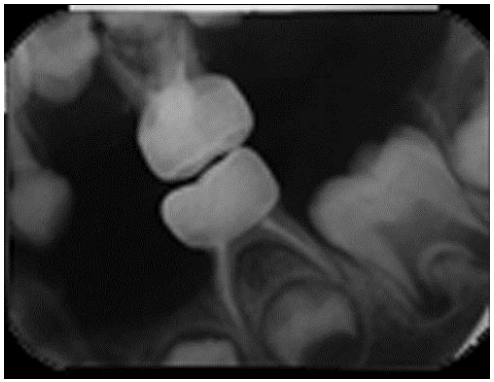
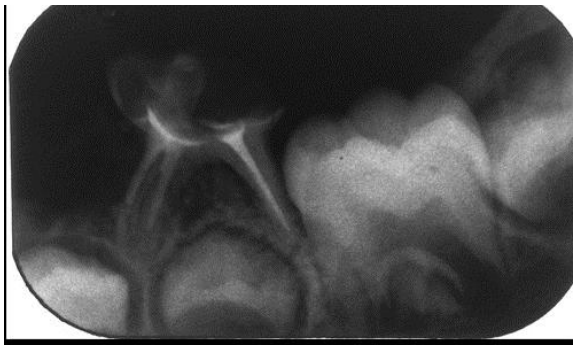
سمت چپ







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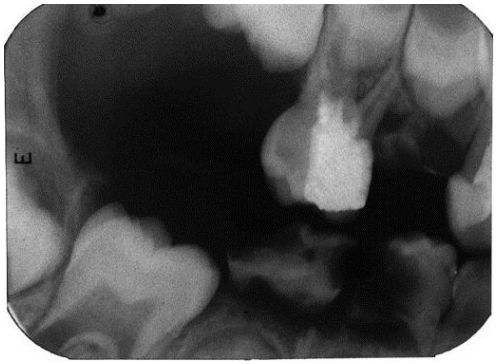

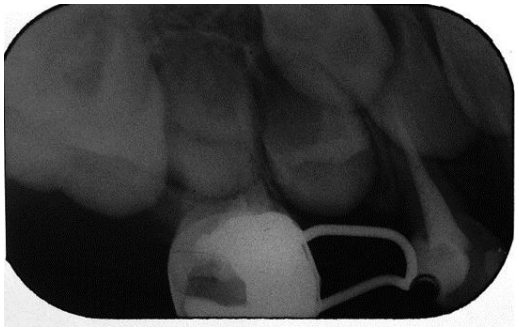

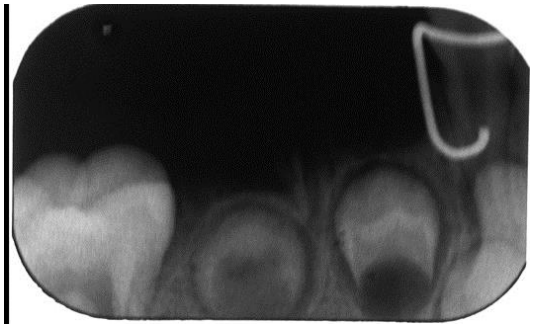

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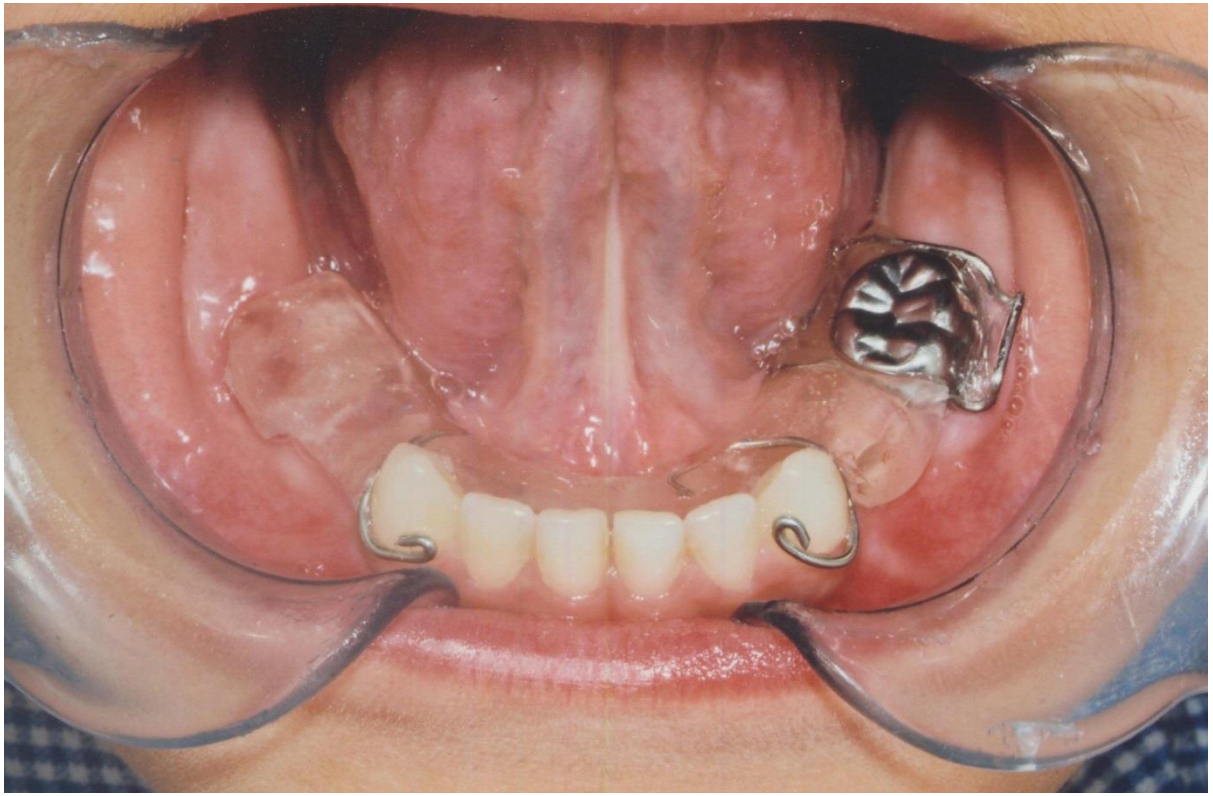

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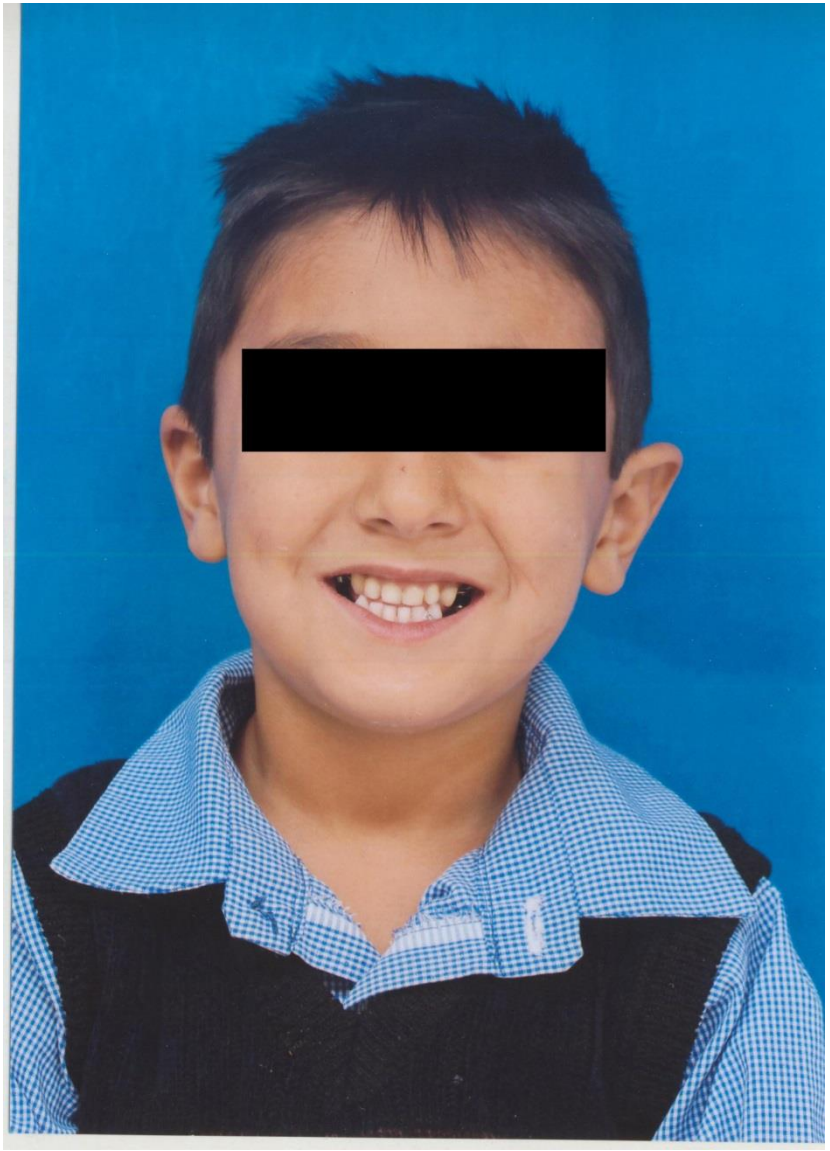

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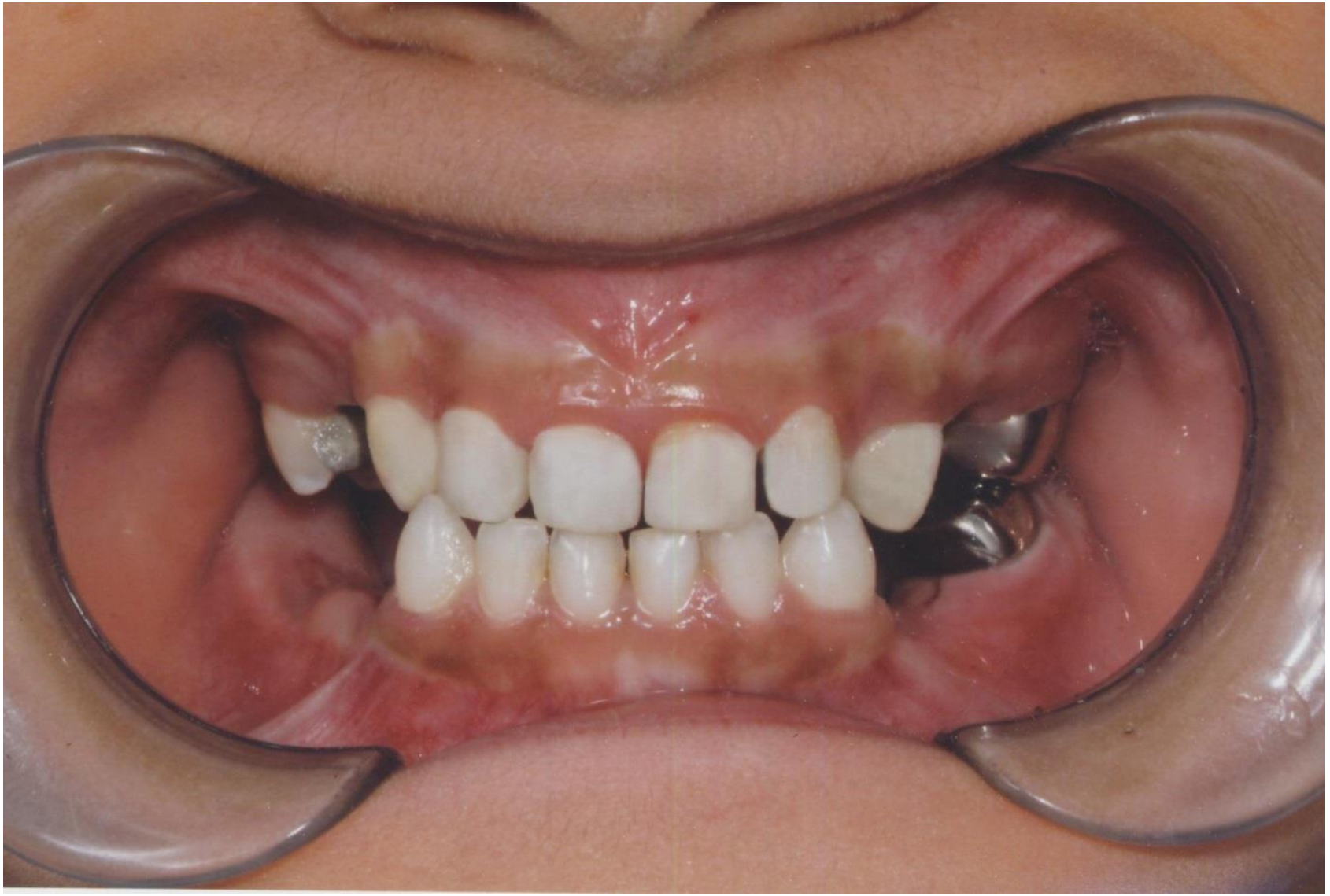

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