PULP THERAPY IN PRIMARY TEETH
SELECTION OF TEETH FOR VITAL PULP THERAPY

• History of pain
• Clinical signs and symptoms
• Radiographic interpretation
RADIOGRAPHIC INTERPRETATION

- Intra-oral & Extra-oral bitewing
- Furcation involvement
- Thickening of the periodontal ligament or rarefaction of the supporting bone
- Root resorption (External/Internal)
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.
CONTRAINICATION:

- 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 PULPOTOMY 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 minutes.
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
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 than 2/3rd 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
فوتوگرافی‌های قبل از کار
فوتوگرافی های قبل از کار
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رادیوگرافی های قبل از کار پری اپیکالهای قدامی
رادیوگرافی های قبل از کار بايت وینگ های خلفی
رادیوگرافی های بعد از کار پری اپیکال قدامی
رادیوگرافی های بعد از کار

سمت چپ
رادیوگرافی های بعد از کار

سمت راست
فوتوگرافی های بعد از کار
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