

Medical students – Year 6

Introduction to Paediatric dentistry

Prof (dr). Arthur Kemoli

Objective of teaching you paediatric dentistry

- To provide you with the knowledge about Paediatric dentistry as a branch of dentistry.
- To make you understand the importance of oral health of the child in the course of your involvement in looking after the general health of the child.

Definition

Paediatric Dentistry - is an age-defined specialty that provides both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.

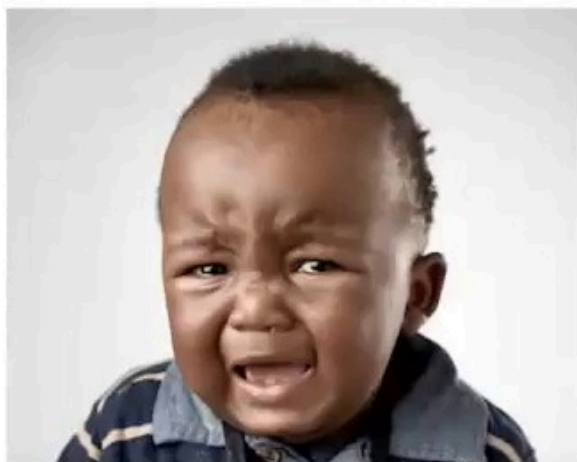
(American Academy of Paediatric Dentistry - *Adopted 1995*)

Paediatric dentistry differs in many ways from other branches of dentistry:

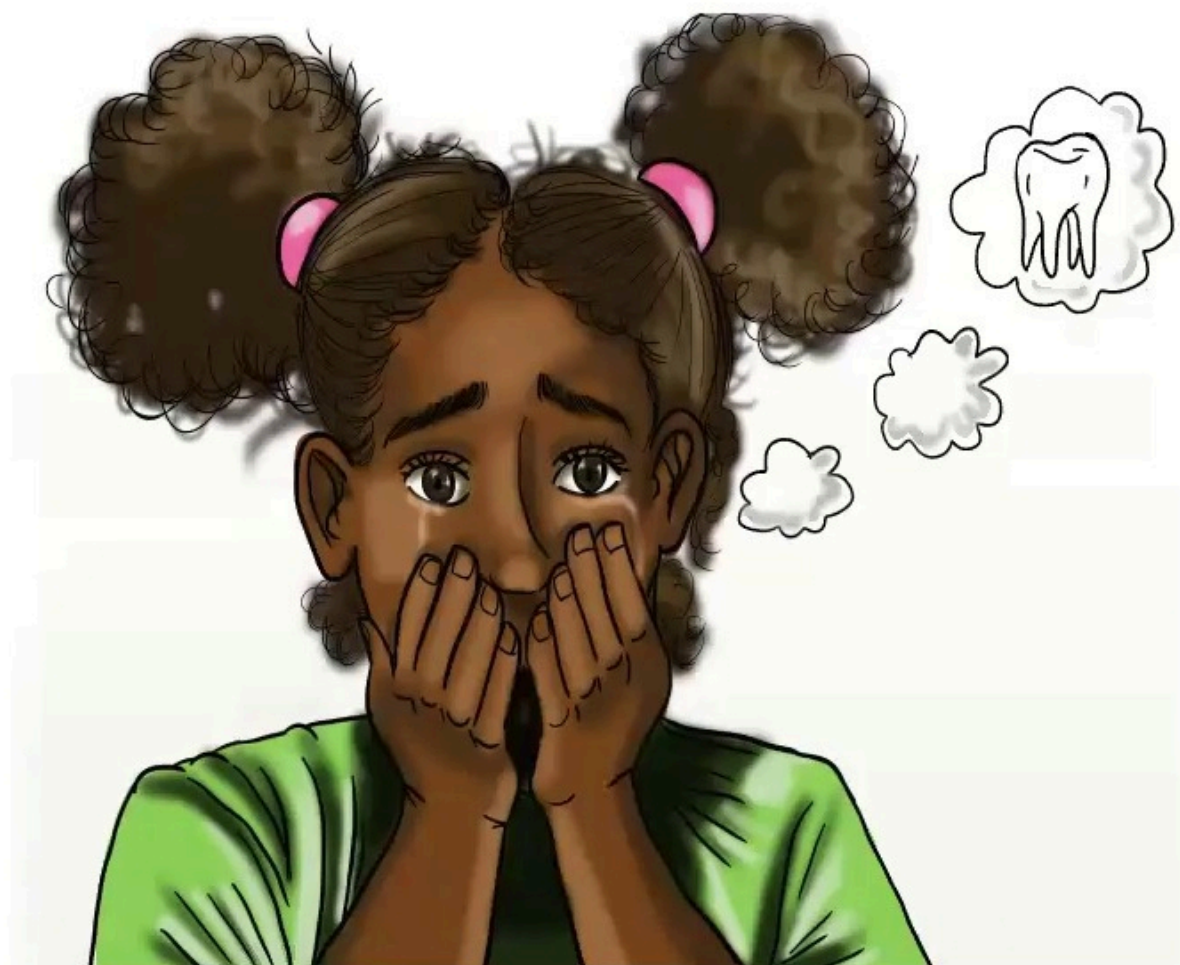
1. You have to develop a relationship with parent & child
2. Study Psychological development of the child for application in behaviour management

Paediatric dentists have to deal with cases such as

Child Anxiety



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Special needs persons requiring oral healthcare

(physical disability)



Dealing with special needs patients (mental disability)



Downs syndrome



Origin of Paediatric dentistry

Dr. Samuel D.Harris is often referred to as the 'father' of children's dentistry organizations.

An American dentist who qualified from Ann Arbor Dental School in **1924**, and enrolled at the Forsyth Dental Infirmary for Children, which had opened in Boston in 1914 to provide Dental treatment for children.

It was the first institution of its kind in the world to offer dental treatment specifically to children.

From here he together with other dentists interested in dentistry for children, spread out the services to the other parts of the world.

The results have seen the rise of Newsletters, journals and Associations, specifically formed to cater for dentistry for children

In 1933, the Society began to publish ***The Review of Dentistry for Children***, and its founder and first editor was Sam Harris. It became the ***ASDC Journal of Dentistry for Children*** in **1941**.

Formation of International Association of Paediatric Dentistry (IAPD) – a world-wide organization.

Today IAPD now publishes the international Journal of Paediatric dentistry - a high powered Journal on Paediatric dentistry, that was strated in 1991.

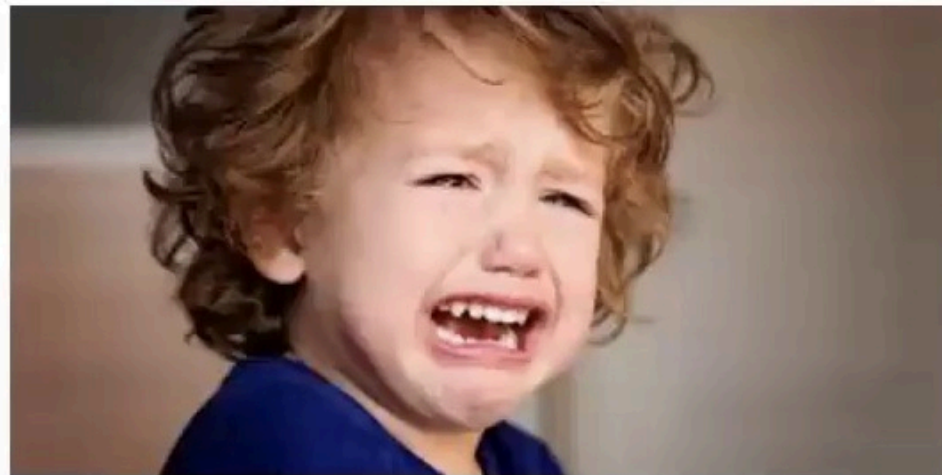
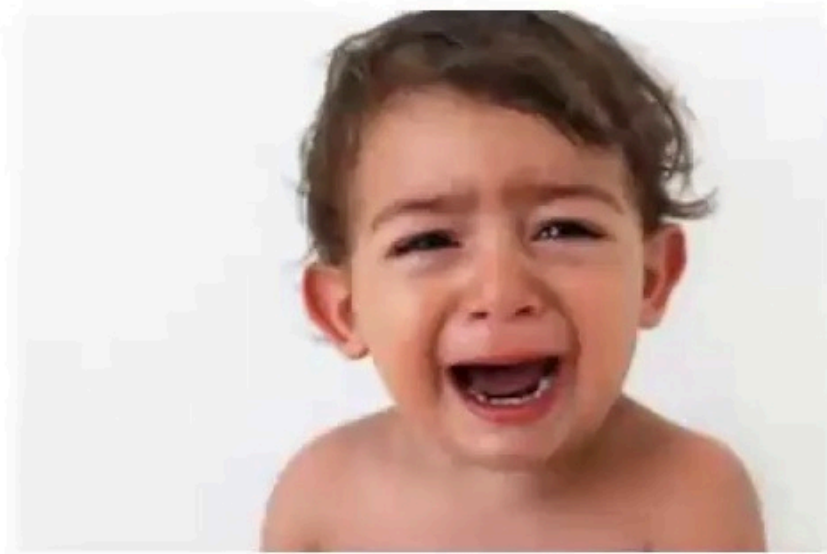
Why paediatric dentistry? child versus adult patient

1. Physical development
2. Emotional and psychological development
3. Behaviour
4. Dentist- patient relationship
5. Parent - dentist relationship

Aims of paediatric dentistry

1. Create good dental patient
2. Instill positive attitude and behaviour towards dentistry
3. Provide preventive dentistry to children
4. Manage children's dental problems
5. Manage children with special health care needs

Anxiety and fear



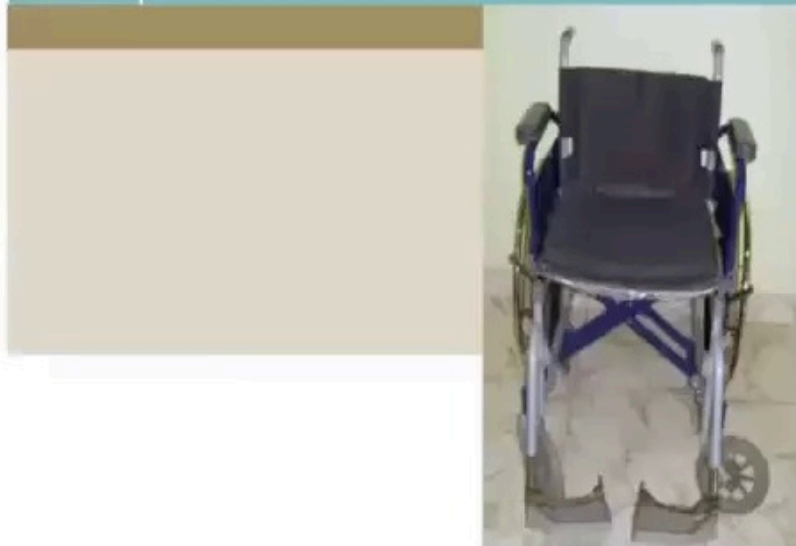
Changing situations to these



Common oral conditions

Cavities	<i>Actinomyces spp</i> <i>Lactobacillus spp</i>
Gingivitis	<i>Campylobacter rectus</i> <i>Actinomyces spp</i> <i>Prevotella intermedia</i> <i>Streptococcus anginosus</i>
Periodontitis	<i>Porphyromonas gingivalis</i> <i>Bacteroides forsythus</i> <i>Actinobacillus actinomycentemcomitans</i> <i>Prevotella intermedia</i> <i>Fusobacterium nucleatum</i>
Periapical abscess	<i>Peptostreptococcus micros</i> <i>Prevotella oralis</i> <i>Prevotella melaninogenica</i> <i>Streptococcus anginosus</i> <i>Porphyromonas gingivalis</i>
Pericoronitis	<i>Peptostreptococcus micros</i> <i>Porphyromonas gingivalis</i> <i>Fusobacterium spp</i>
Periimplantitis	<i>Peptostreptococcus micros</i> <i>Fusobacterium nucleatum</i> <i>Prevotella intermedia</i> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus spp</i>

Setup of paediatric dental clinics



Examining the child



Scope of paediatric dentistry

Good oral health



The scope rotates around 5 areas of oral health:

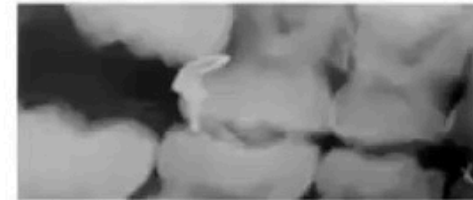
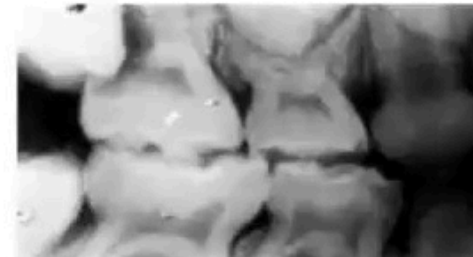
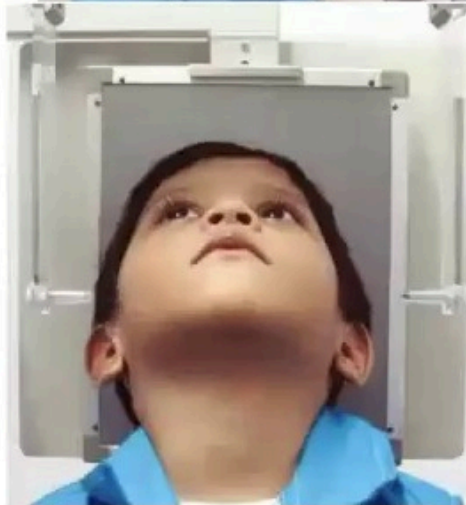
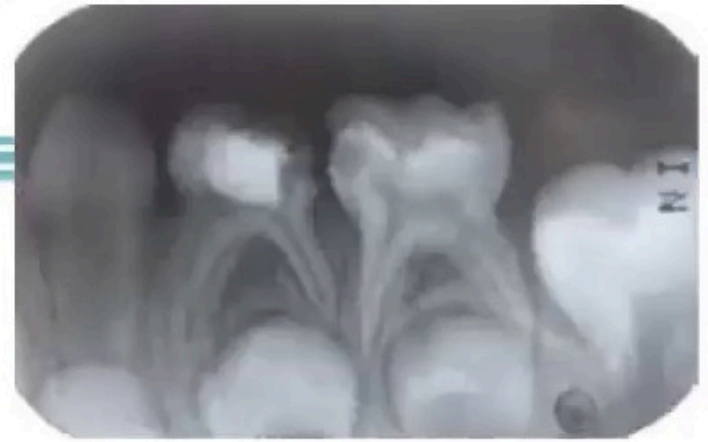
1. **Preventive procedures** – including preventive orthodontic
2. **Interceptive procedures** – orthodontics, oral surgery, oral medicine
3. **Corrective procedures** - restorative, endodontics
4. **Emergency procedures** – oral medicine, oral surgery
5. **Special needs**

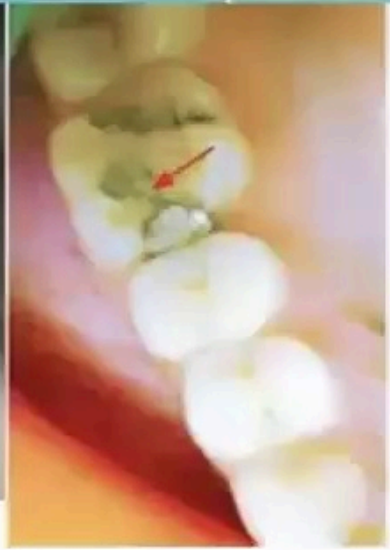
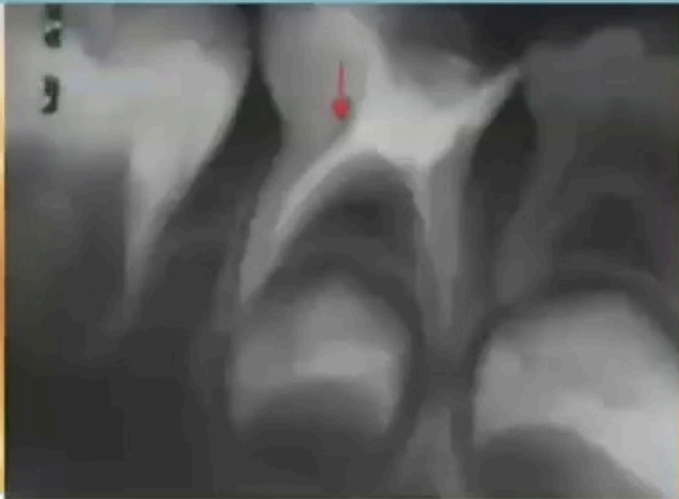
(a). Preventive Dental Procedures:

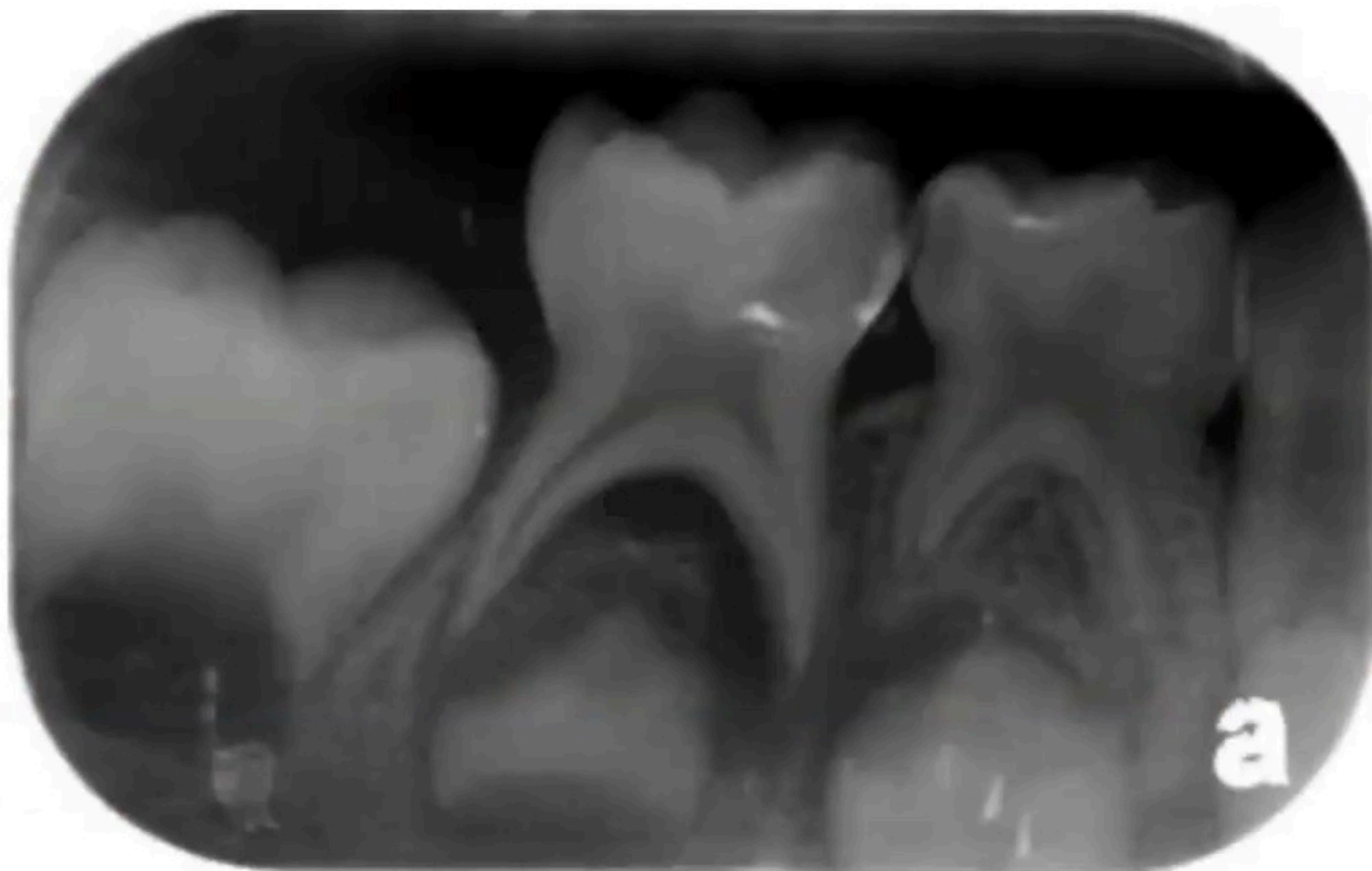
- 1.Oral Prophylaxis (professional cleaning and polishing)
- 2.Fluoride Application (to strengthen enamel and prevent cavities)
- 3.Diet Analysis and Counseling
- 4.Pit and Fissure Sealants (Dental Sealants)
- 5.Home Care
- 6.Designing of appliances to prevent sports injuries
- 7.Correction of teeth alignment to prevent Dental Trauma (Trauma-prone alignment of teeth)
- 8.Provide comprehensive or total patient care

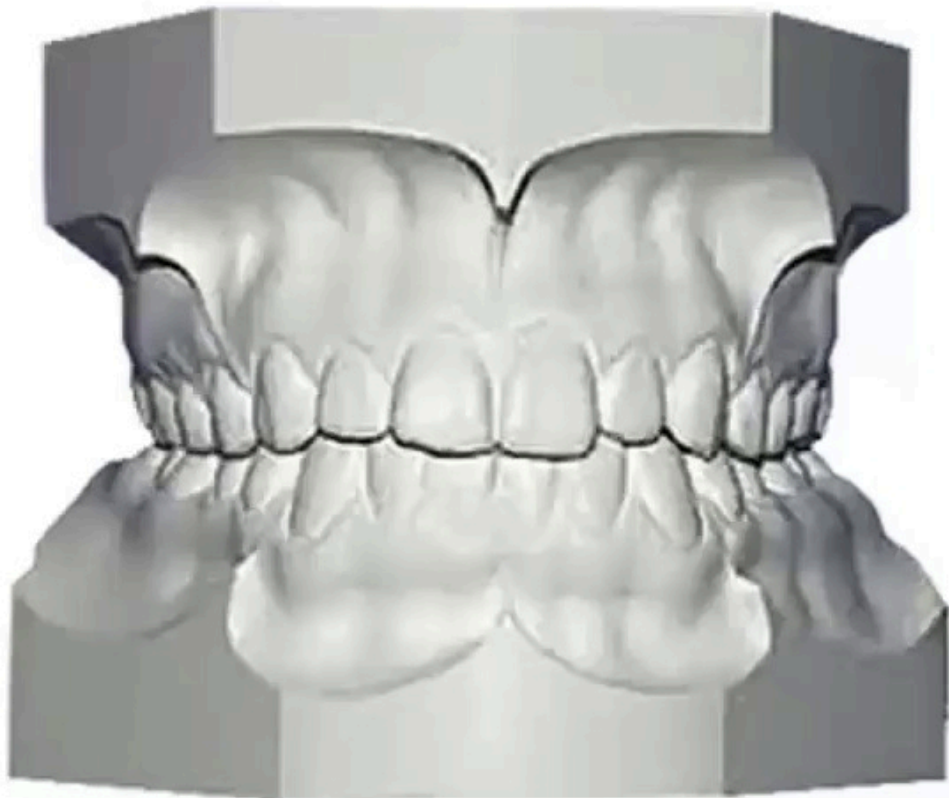


investigations





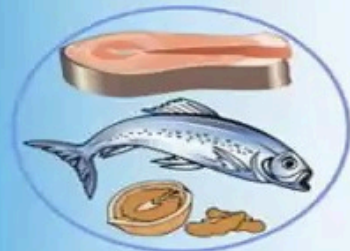




Diet chart

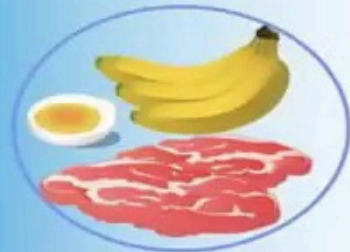
	Breakfast	Lunch	Snack	Dinner
Mon	Peaches and Cream Oatmeal	Creamy Potato Soup	Cheesecake Bites	Healthy Turkey Meatloaf
Tues	Chocolate Banana Smoothie	Homemade Mac and Cheese	Homemade Lara Bar	Easy Weeknight Veggie Gnocchi
Wed	Yogurt and Berries	Quinoa Pizza Muffin	Homemade Banana Pudding	Instant Pot Indian Butter Chicken
Thurs	Scrambled Avocado Eggs	Wisconsin Cauliflower Soup	Strawberry Banana Frozen Yogurt	Butternut Squash Alfredo
Fri	Snickerdoodle Oatmeal	Homemade Uncrustable	No-Bake Mixed Berry Snack Bites	Golden Lentil Soup

PRODUCTS USEFUL FOR THE BODY



BRAIN

salmon, tuna,
sardines, walnut



MUSCLE

bananas, red meat,
fish, eggs



LUNGS

broccoli,
Brussels sprouts,
Chinese cabbage



SKIN

blueberries, salmon,
green tea

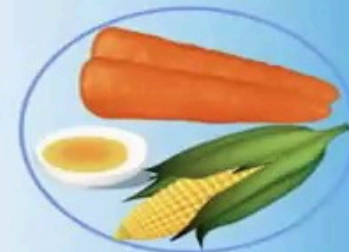
HAIR

green vegetables,
beans, salmon



EYES

corn, eggs, carrot



HEART

tomatoes,
potatoes,
prune juice



BOWELS

prunes, yogurt

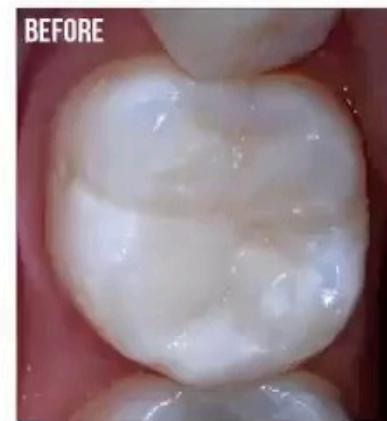
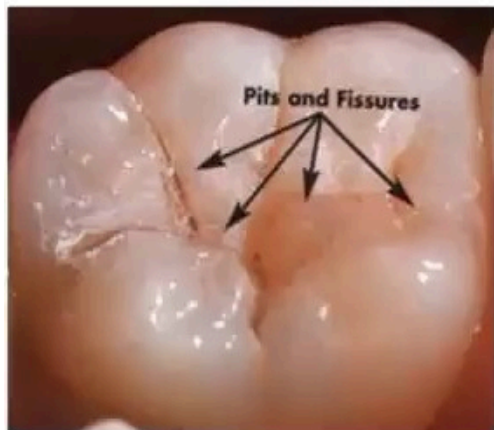


BONE

oranges,
celery, milk



Good oral health

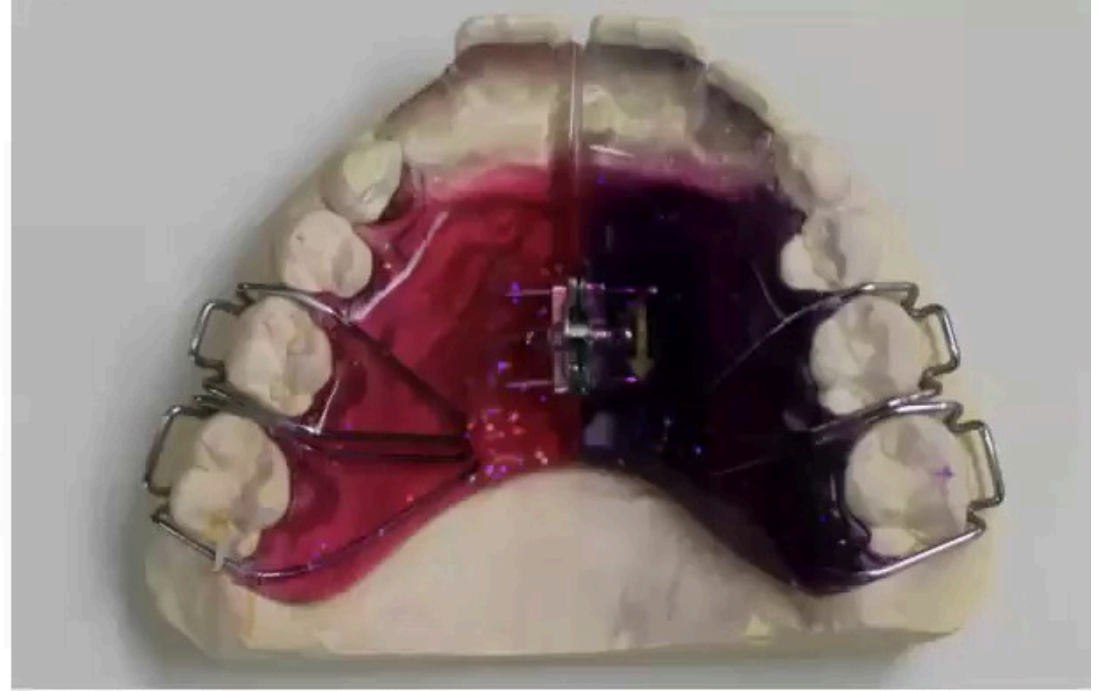


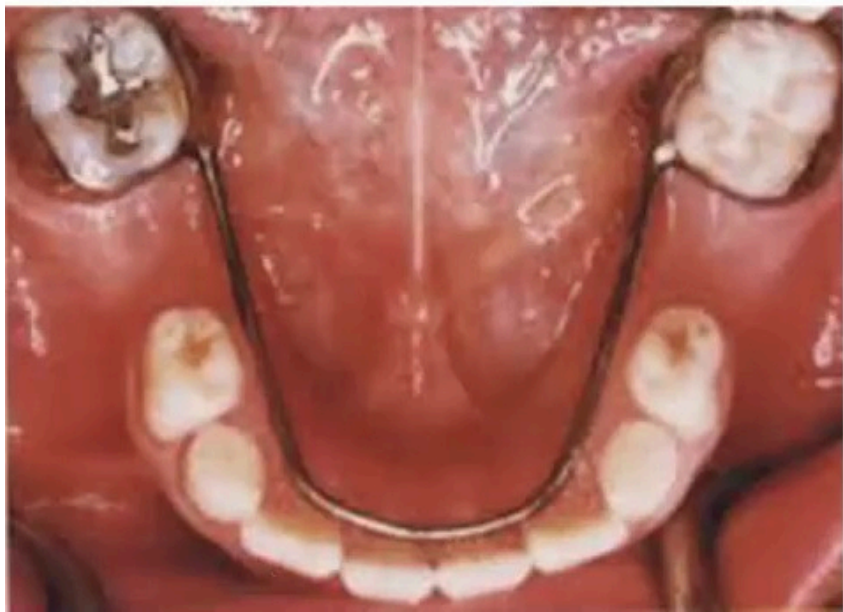
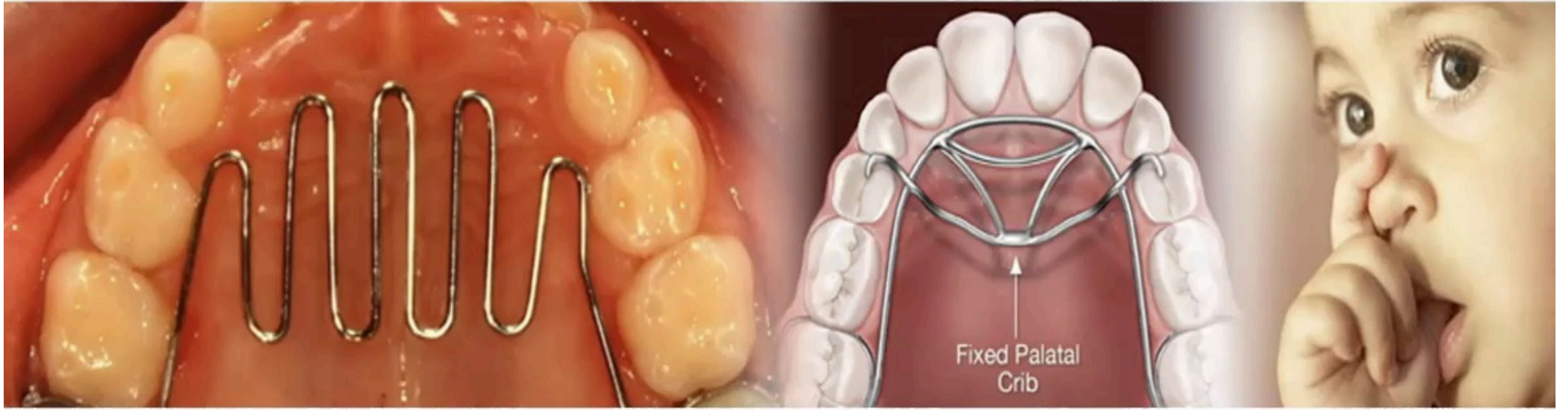
(b). Interceptive Procedures:

1. Habit correction (habits like thumb sucking, tongue thrusting, etc.)
2. Growth analysis and modification
3. Correction of poor alignment of developing teeth
4. Space Maintainers (Spacers which maintain space required)



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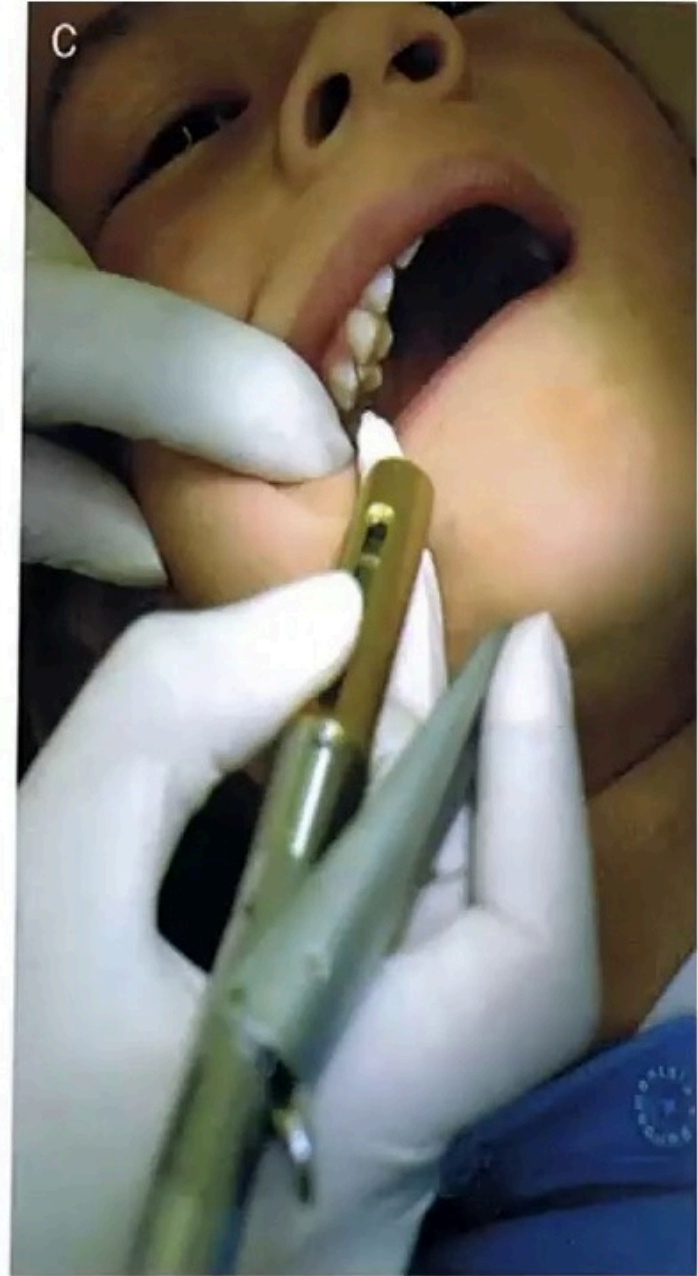




©. Corrective/Therapeutic Procedures:

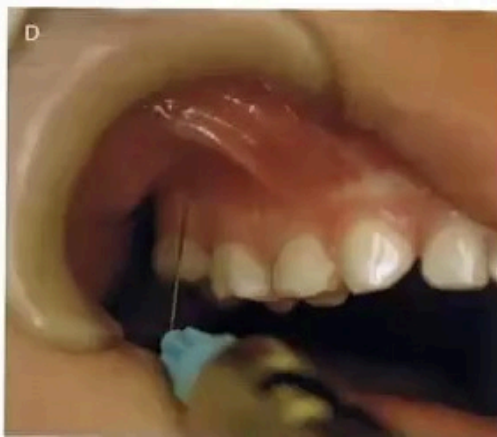
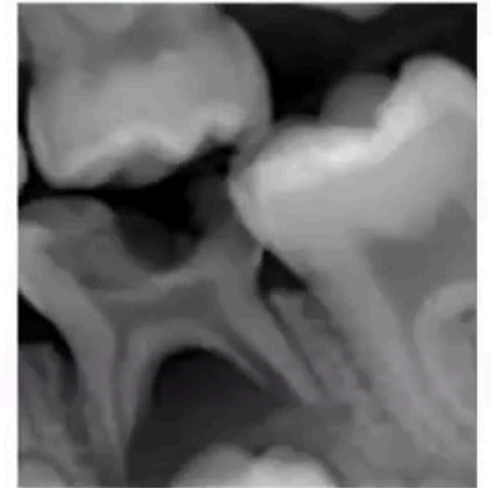
- Dental Fillings
- Pulpal Therapy (Root canal treatment in children)
- Procedures aimed at restoring fractured or broken tooth structure – Caps/Crowns
- Dental extractions (where required)



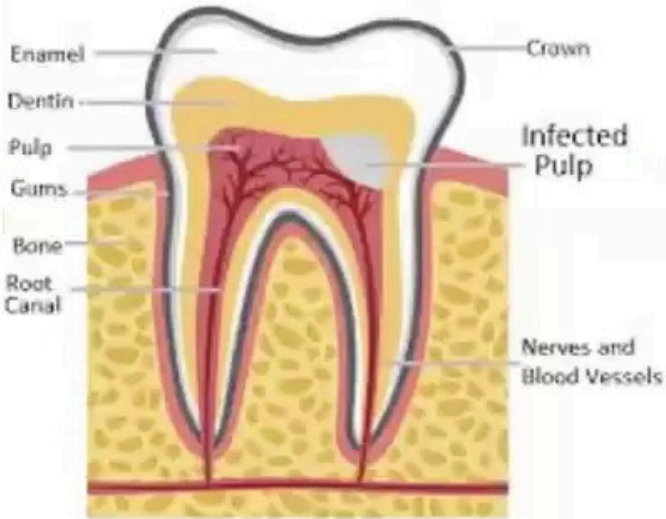




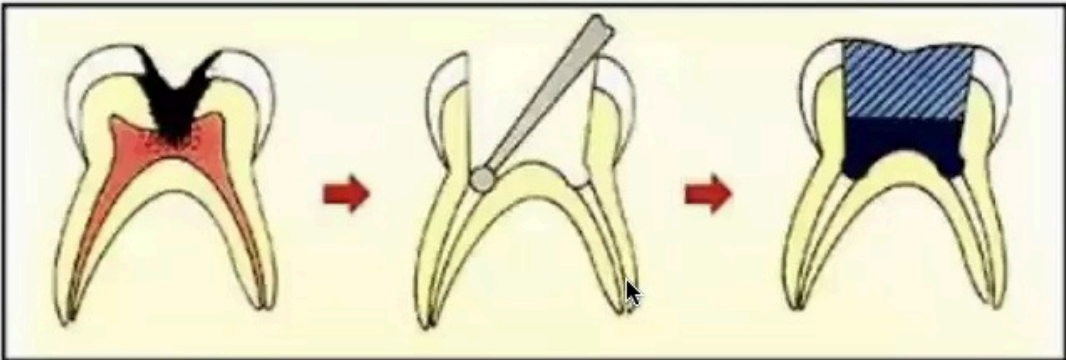
Dental caries

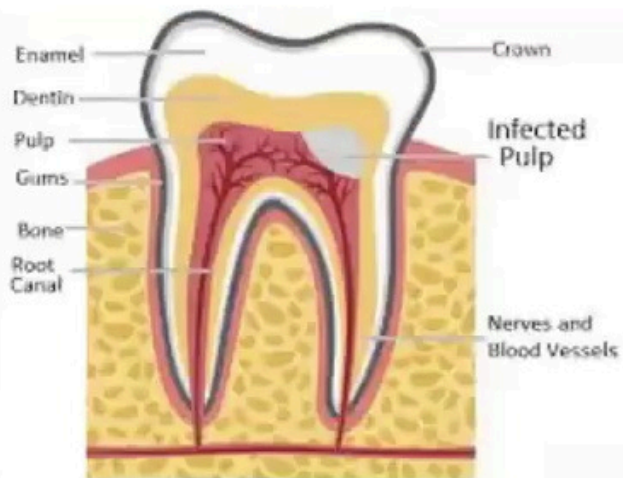


White Fillings

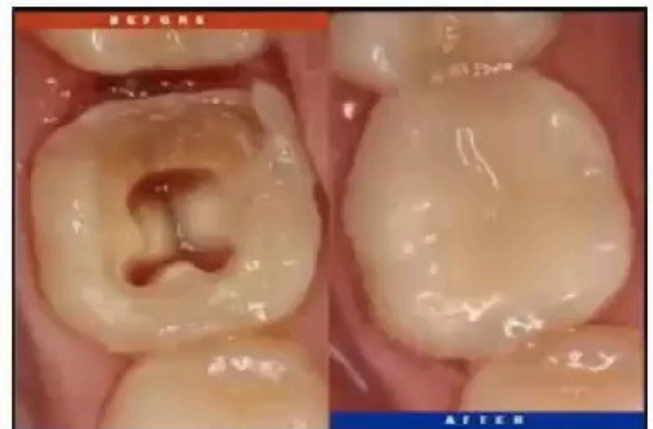
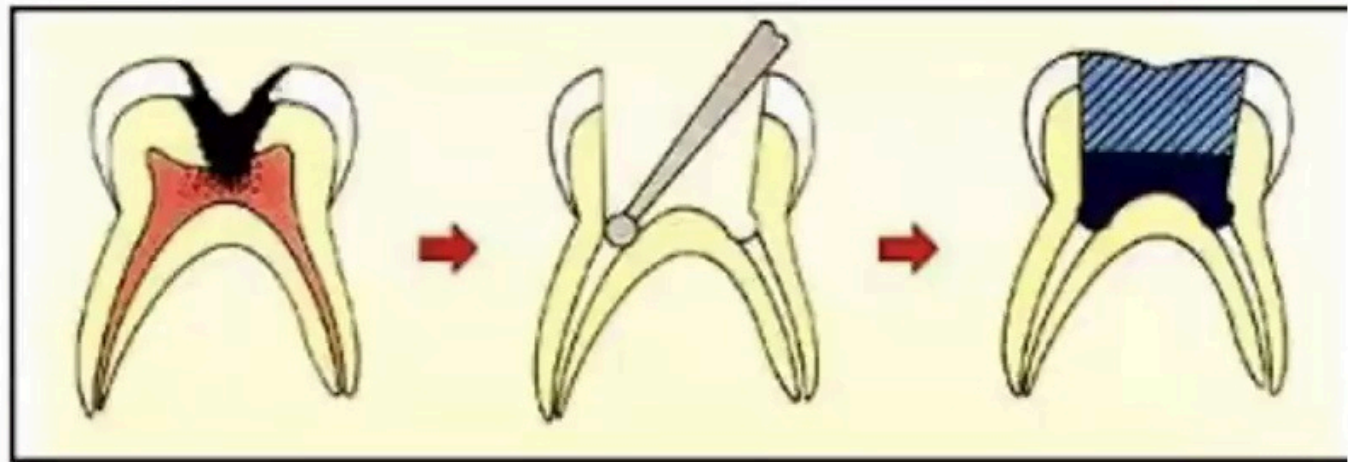


Infected Pulp in Crown is removed
replaced with a filling



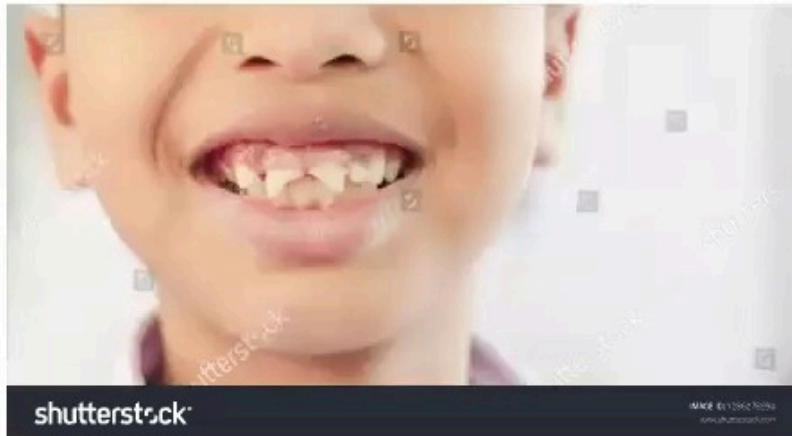


Infected Pulp in Crown is removed and replaced with a filling



(d). Management of Dental Emergency:

- Dental Trauma (bruises, lacerations etc requiring emergency management)



- Replantation (replacement) of avulsed tooth (tooth that has popped out due to an accident)

Other conditions



Fluorosis



Bacterial/viral infections





Figure 3: Clinical appearance. Swelling of the floor of the mouth.

(e). Management of Children who are 'differently-abled' (Special-Care Dentistry):

- Syndromic Children
- Physically/Mentally challenged patients
- Management of Children with Dental Phobia and Anxiety
- Dental Management of Children with existing Medical Condition
- Management of Children with Cleft lip and palate



Where it is not possible to manage child alternative means of behavior control/modification can be applied

**Non-pharmacological –hand over mouth, papoose board etc
Pharmacological – Sedation, GA**

E N D

