



PEDIATRIC DENTISTRY DISCIPLINE

UMF „Victor Babes” Timisoara

PRACTICAL CLASS 7

DENTAL IMPRESSION IN CHILDREN AND ADOLESCENTS



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Rules for the operator while taking impression in paediatric dentistry

- Children may be anxious about having impressions made and a careful explanation is given before starting the procedure
- Appropriate tray selection is also a very important step while taking impressions in children
- The amount of impression material placed on the tray should be adequate and exceptional care should be taken in the upper jaw; any excess material on the tray may be displaced into the pharynx and can cause gagging;
- The posterior half of the tray may be loaded with less material



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Rules for the operator while taking impression in paediatric dentistry

- The quality of the material, the mixing procedure, the working and the setting time can influence both the behaviour of the child and the quality of the impression
- While placing the tray inside the mouth, it should be well positioned and then pressed against the posterior side and with a rotation movement afterwards pressed against the front teeth
- Usual impressions in pediatric dentistry are made of alginate material
- Depending on the age of the patient and the position of the patient in the dental chair while taking the impression, another material like silicone can be used to block the posterior part of the tray, for not allowing the material to flow into the pharynx and cause gagging



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Rules for the operator while taking impression in paediatric dentistry

- Distraction techniques are very useful:
 1. Asking the child to raise his or her finger or thumb as specified by the operator e. g. show me the right little finger or left thumb or left middle finger, etc
 2. Asking the child to lean forward and breathe through the mouth
 3. A small dab of alginate is placed over the child's thumb or finger and asked to raise the hand once it sets
 4. Asking the patient to breath on the nose
 5. Asking the patient to raise the legs alternatively
 6. Asking the patient to count within himself until 30 or 50



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- The main steps of the procedure are:
 1. Assemble the armamentarium
 2. Seat the patient
 3. Position the patient and inspect the mouth
 4. Lubricate the patient's lips
 5. Select the appropriate trays for the maxilla and for the mandible
 6. Ask the child to rinse his mouth
 7. Proportion the water and powder and test the water temperature, before starting the mixing procedure
 8. Prepare the alginate



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9. Load the tray with material, it is recommended to start the impression on the lower jaw
10. Apply a preliminary layer of alginate in the mouth, which can be an optional step in some clinical situation
11. Position and seat the tray
12. Remove excess alginate, when necessary
13. Hold the tray steady for the prescribed time
14. Remove the tray
15. Allow patient to rinse
16. Rinse the impression



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17. Evaluate the impression: if all the detail is reproduced; the detail is sharp, not blurred or indistinct; free of voids in the critical areas; no areas where the alginate has been pulled away from the tray; alginate thoroughly covers the tray; the alginate is smooth, not sponge-like
18. Trim away excess alginate, if possible
19. Take the silicone or wax bite registration
20. Disinfect the impression (spray the impression and wait the recommended time)
21. Send the impression to the laboratory, wrapped in a sealed bag with 100% humidity



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PRACTICAL CLASS 8

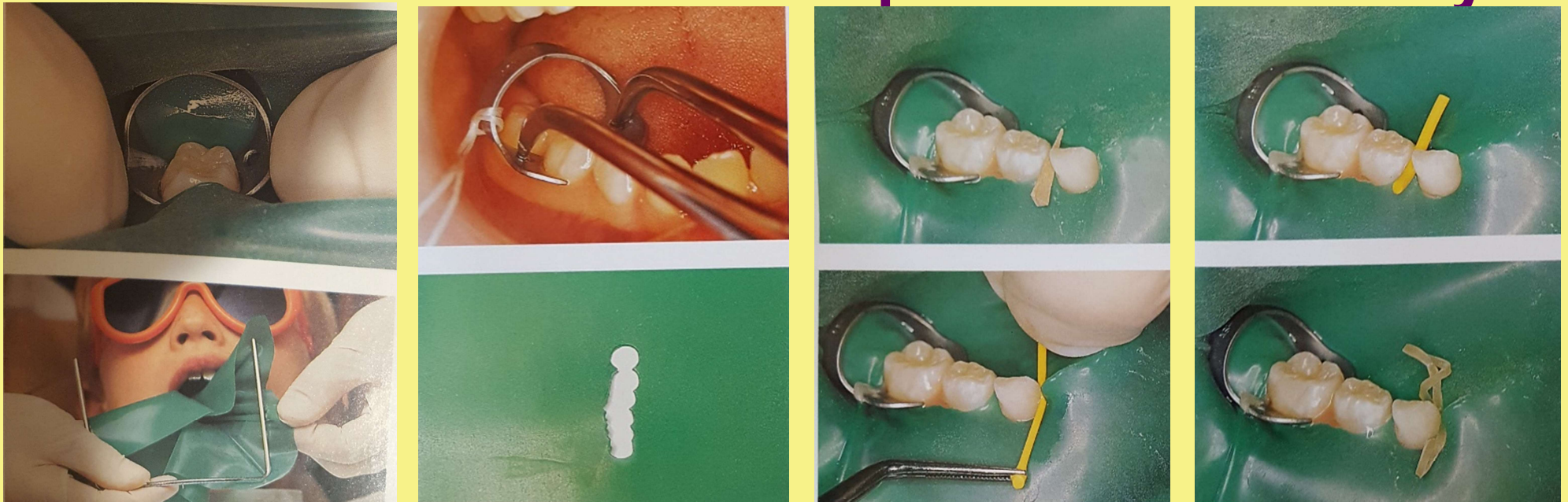
DENTAL TREATMENT OF PRIMARY TEETH



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Rubber Dam isolation in paediatric dentistry:



- **Isolation of a single tooth** (ex: one primary molar)
- **Isolation of one quadrant**, very useful in pediatric dentistry, when we perform the treatment of 2-3 teeth in the same visit or for gaining good proximal access during the procedure



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Rubber dam isolation in paediatric dentistry



- Very helpful isolation in paediatric dentistry, when we want to gain access to the frontal teeth, obtained when placing 2 clamps on the first primary molars, on both sides



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Proximal decays of primary molars, specific materials used in paediatric dentistry:

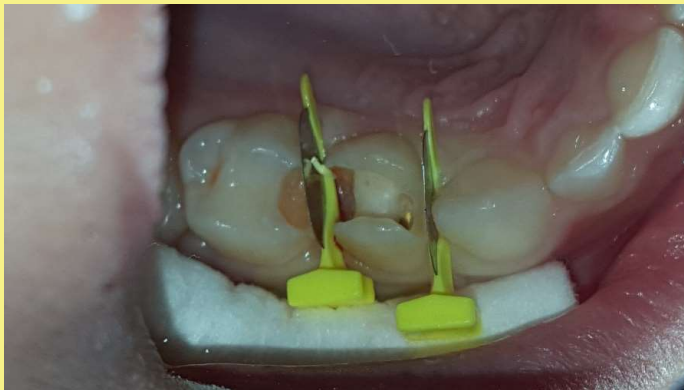
- Colored restorative materials (composers)
- Composite materials
- Glass Ionomer Cements
- Stainless steel crowns
- Zirconia crowns
- Different types of matrices, used for proper adhesion and morphological restauration of the proximal surfaces of the primary teeth



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Bibliography:

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