Operative pediatrics dentistry labs

Techniques: Class-I and Class- II

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Restorative materials

- The restoration of carious primary teeth is still a major treatment need in young children.
- Despite the decline in dental caries in children, many carious lesions in primary teeth are untreated, leading to pain and extractions (Kilpatrick et. al., 1995).

Why different demand?

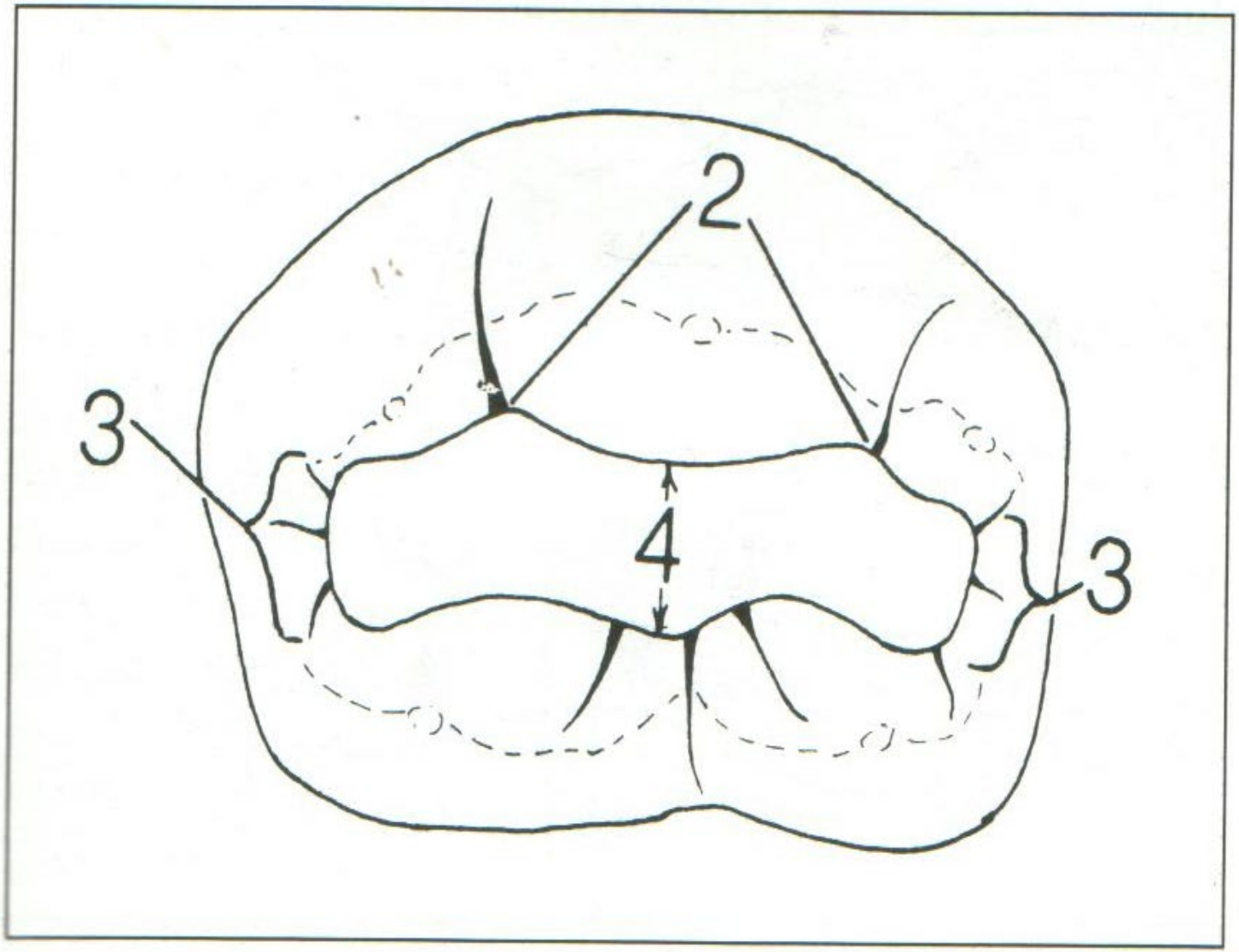
- Limited life span of the teeth themselves
- Variable levels of cooperation achieved by children
- Different morphology of primary teeth.

Morphology of primary teeth

- Greatest convexity at cervical third of the crown
- Mesiodistal width and crown length
- Enamel and dentine thinner
- Larger pulp with prominent pulp horns
- Pulp close to the mesial surface
- Contact areas broad and flattened
- Longer, more flared and slender molar roots

Class I cavity preparation

- Penetrate 0.5 mm into the dentin.
- Round line angles. The walls are wider at the pulpal floor than the occlusal opening. This convergence aids in retention of the restoration.
- Slightly round the pulpal floor. All internal line angles should be rounded.
- Establish a sharp cavosurface angle.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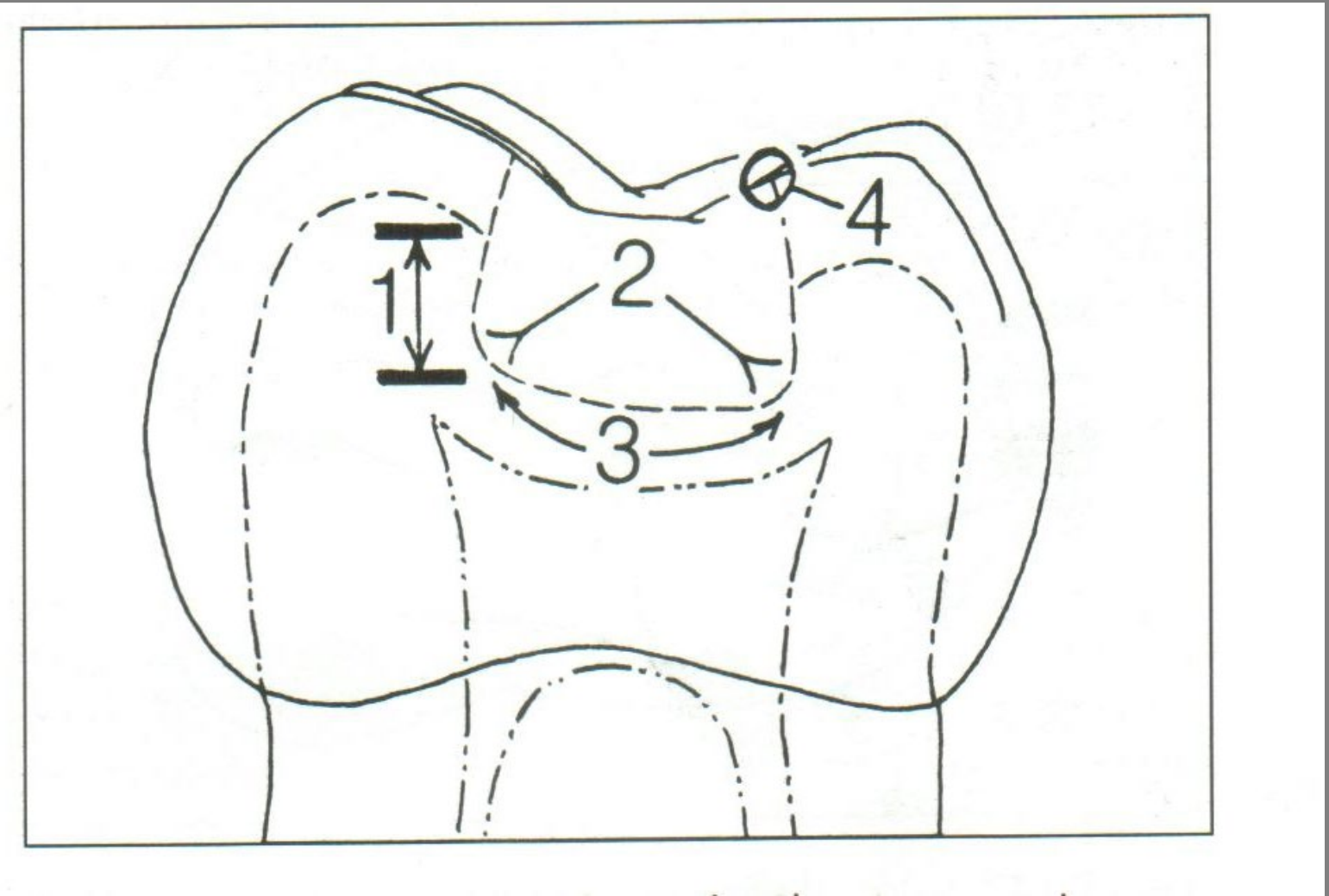
Internal outline form of a Class I preparation on primary tooth

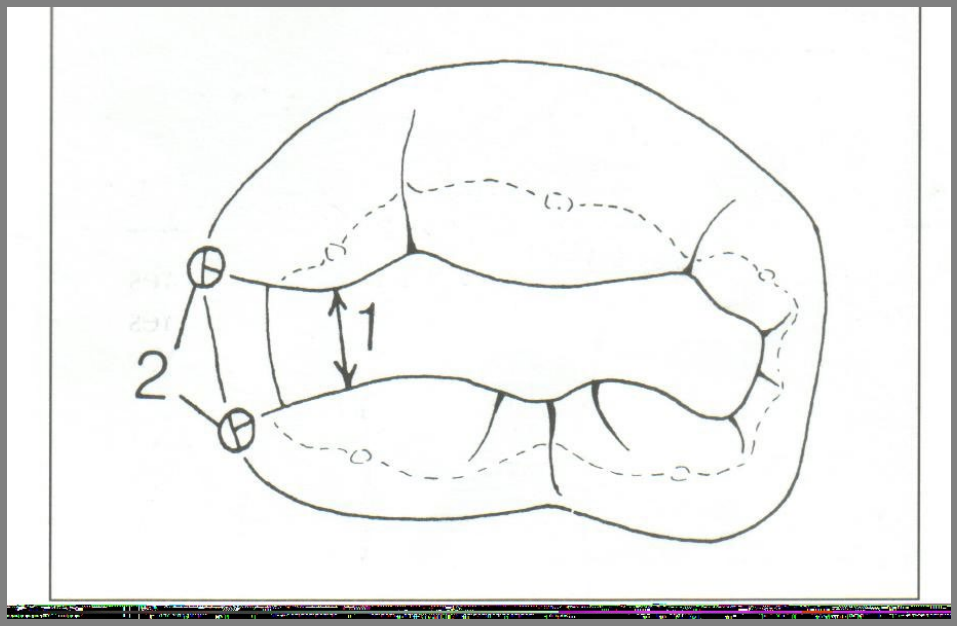


Class II cavity preparation

Occlusal view

1. The isthmus is one half the width of the occlusal table.
2. Curve the proximal wall gently, creating an angle 90^0 to the axial surface of the tooth

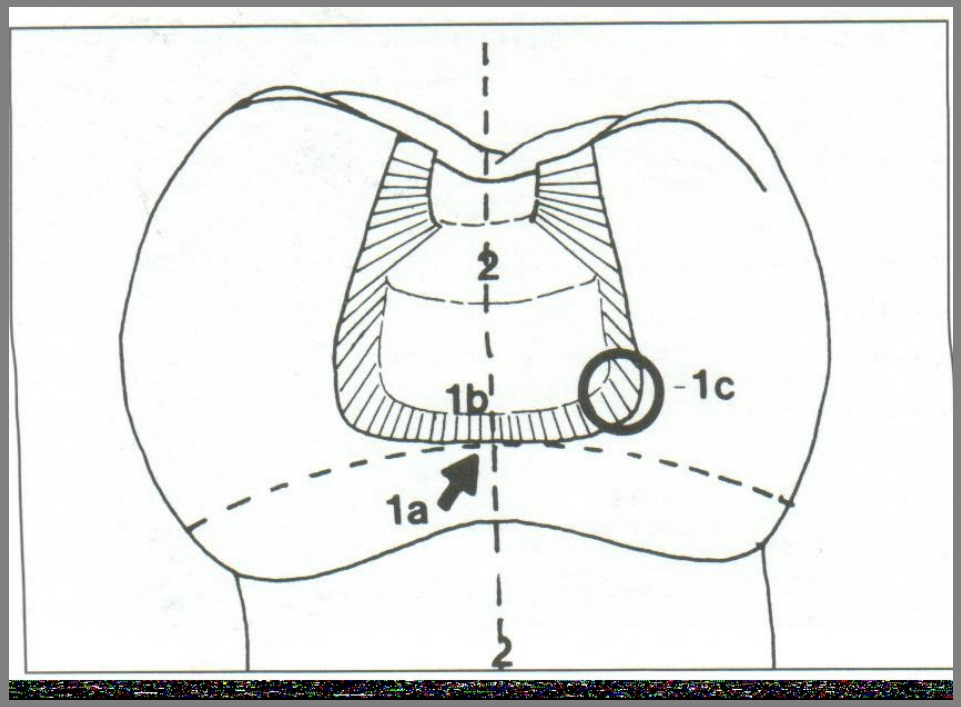
- The adjacent tooth governs the proximal extensions.



Cross – section proximal box area

1. In establishing the gingival floor keep in mind that
   a. It is at the level or slightly below the gingival as determined by the caries.
   b. It should be perpendicular to the long axis of the tooth.
   c. It has rounded line angle

2. Keep the proximal box in an occlusogingival direction roughly parallel to the long axis of the tooth.



Occlusal and internal view of the proximal box area

1. Gently curves buccolingually to follow the contour of the proximal surface
2. Extend so that an explorer tip can pass through the embrasure
3. Round the axiopulpal line angle and other line angle.
4. Do not bevel the gingival margin.

↳ keep 90°

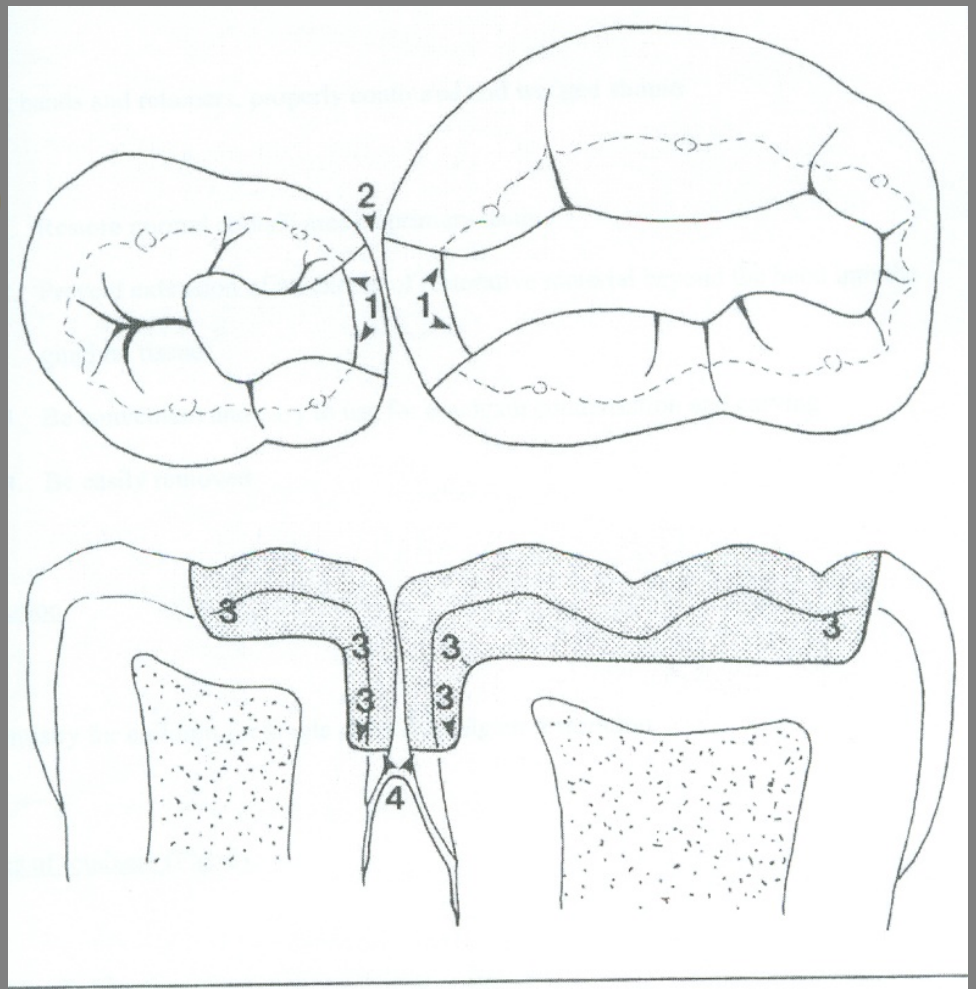


Fig 5 Internal and external view of two class II primary molar restoration

T-Band

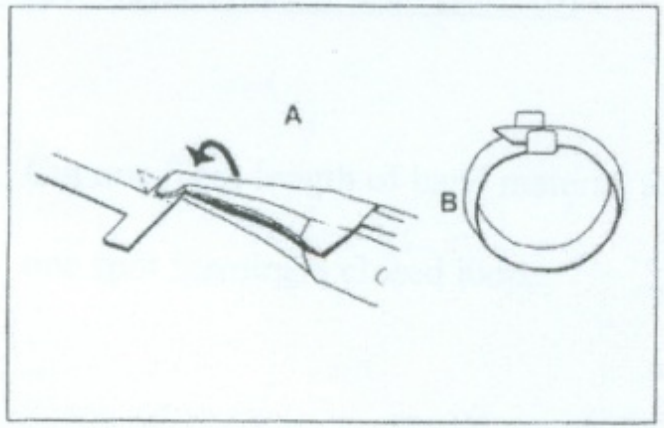


Fig 7 (A) Bend the T of the band

(B) From a clasp

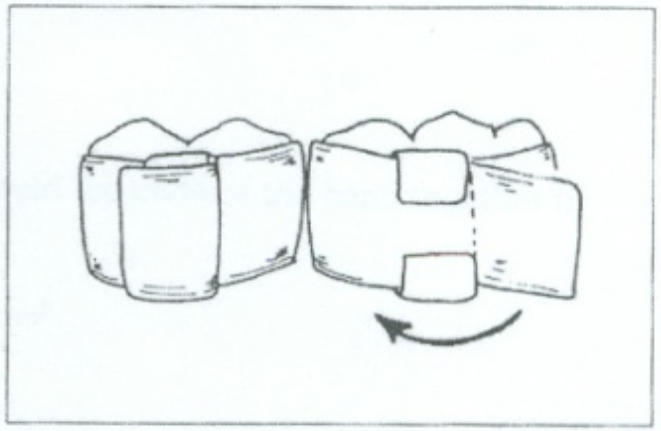


Fig 8 Fold the tab over to form the band

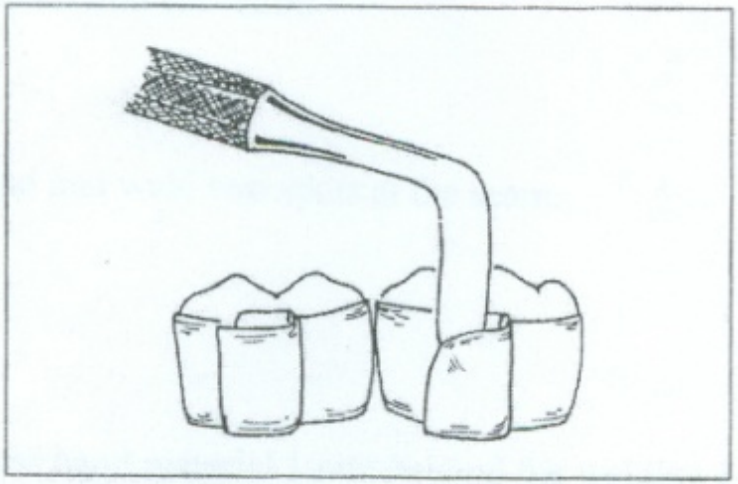


Fig 9 Remove the T band by loosening the tab

Rubber Dam