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Effects of EDTA and water storage on the bonding durability of different adhesive resin cements to intra-radicular dentin

乙二胺四乙酸处理和水储存对不同树脂粘结剂与根管牙本质间粘结耐久性的影响

Key words: Water storage, EDTA, Resin cements, Bonding durability

关键词: 水储存; 乙二胺四乙酸; 树脂粘结剂; 粘结耐久性

- As most bonding failures occur at the dentin- cement interface rather than at the post-cement interface, adhesion between the intra-radicular dentin and adhesive resin cements is considered the weak link.
- Exposure to water is known to degrade dentin bonding, and the durability of bond strength is equivocal and remains an important issue.
- Irrigation with EDTA, known for its mild demineralization and low abrasion on dentinal substrates, has been reported to remove the smear layer effectively.

Conclusion

- Water storage may play an important and deleterious role in degradation of bonding effectiveness.
- Irrigation with EDTA after post space preparation can effectively improve bond strength.