

Improvement of long-term durability of dentin-bonded materials

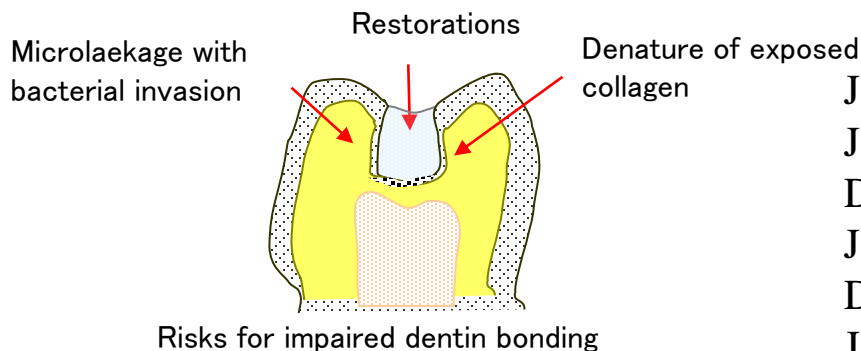
The auto-degradation of dentine collagen fibrils is responsible for bond degradation within hybrid layers.

Solutions to prevent dentin bond degradation are:

1. Increasing the functional monomers into dentin substrates
2. **Inhibitors of Collagenolytic Enzymes**
3. The use of cross-linking agents to stabilize collagen matrix, and/or to alter the activities of MMP and cathepsins

The effect of chlorhexidine to improve dentin bond durability:

I evaluated chlorhexidine release from unfilled non-solvated methacrylate-based resins.



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