

**Prismless Enamel and its Effect On Enamel Surface Etching in
Deciduous Molars**

Abstarct

The purpose of this work was to study the structure and thickness of the prismless layer in deciduous molars and to evaluate the effect of different acid concentrations and different etching times on this prismless enamel. The teeth were examined with polarized light and scanning electron microscope. The surface enamel shows a more negative birefringence in contrast to the underlying enamel. The prismless enamel was categorized into false, moderate, essential and complex types according to whether they took the form of distinct prisms which bended at the subsurface, indistinct or circularly based prisms or not. 10% phosphoric acid gel for 15 or 45 seconds did not produce suitable morphological changes for the purposes of retention or mechanical bonding of resins, while etching with 35% for 15 and 45 seconds produce a significant etching patterns suitable for resin bonding with complete removal of the prismless layer.