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**Retention of Dual Cure Sealant with Bonding Primer. J. M. SOH\*, I. C. PUNWANI, N. SOH, C. Y. HA, and A KOERBER (Univ. of Illinois at Chicago, Chicago, IL).**

The control of moisture is important in the retention of sealants. The new hydrophilic bonding primers are designed to be used on moist enamel and dentin. The objective of this study was to evaluate and compare the retention of dual cure sealant with a hydrophilic single primer (Æliteseal Dual Cure Sealant, Bisco, USA) with a conventional sealant (Delton™ Light Cure Sealant, Dentsply, USA) on primary and young permanent teeth at six-year recall examination. Study subjects were between five and ten years of age. Each subject was randomized to receive one sealant system on one side and the other sealant system on the contra lateral side. Teeth in Æliteseal™ group were etched and moistened, primed, dual cure sealed, and light cured for 15 seconds. For the Delton® Light Cure Sealant, the teeth were etched, dried, sealed and light cured for 20 seconds. Three hundred and fifty non-carious, sound occlusal and occlusal lingual/buccal groove surfaces of primary molar and young permanent premolars and molars in 60 children were sealed. One hundred and twelve teeth in 29 children were available for re-evaluation. A Chi-square analysis demonstrated that the dual cure sealant group, Æliteseal™, showed a significant higher level of retention when compared to the conventional sealant, Delton®, at six-year recall examination in permanent teeth (n=112, Chi Square (1df) = 15.88, p<.000). Too few primary teeth were retained (n=3) to compare retention between groups. In conclusion: Æliteseal™ performed better than Delton® in sealant retention in permanent teeth at six-year follow-up.