

39th Asia-Pacific

DENTAL AND ORAL CARE CONGRESS

October 26-28, 2017 Osaka, Japan

Comparative study of the dentin bond strength of a new universal adhesive**Khalid Saad Saleh Almaghnam**

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This study compared the dentin bond strength of a new universal adhesive with that of contemporary multi-step dentin adhesives. Six experimental groups were prepared according to the adhesives used and their application modes: Optibond FL (OB), Adper single bond plus (SB), One-step plus (OS), CLEARFIL SE bond (CS), all-bond universal using etch-and-rinse mode (ABE), and all bond universal using self-etch mode (ABS). Micro-tensile bond strength (μ TBS) and failure mode were evaluated for each group. The bonded interface was analyzed using transmission electron microscopy (TEM). As a result, μ TBS of 6 experimental groups was followed as: OB=ABE=SE=ABS>SB>OS group. TEM micrographs of ABE and ABS groups revealed a homogenous adhesive layer formation. In conclusion, a new universal adhesive can make reliable bond to dentin, regardless of the application mode.

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