Bonding strength efficiency of a new adhesive bonding system for repairing fractured denture base

Acrylic resin is the most widely used material for construction of dentures. Transverse strength of acrylic resin is generally sufficient to resist fracture caused by the application of high masticatory load. However, fracture of denture will occur as a result of fatigue. This study investigated the bonding characteristics of adhesive bonding system as a repair material for both fractured heat-cured denture base resin and tooth, and its reaction on the oral mucosa following its use. The findings of this study indicated that the use of adhesive bonding system with autopolymerized resin (PMMA) resulted in an improved bond strength of the fractured heat-cured denture base. The bonding of both acrylic and porcelain denture tooth with adhesive bonding system was resulting in stronger serviceable and esthetic tooth.