Efficacy of proanthocyanidin pretreatment on push-out bond strength between a glass fiber post and root dentin-an invitro study

Dr Ambalavanan P

1Associate Professor, Department of Conservative Dentistry and Endodontics, Sri Ramakrishna Dental College and Hospital, Coimbatore-641006, Tamilnadu, India.

Abstract:

Posts are indicated to restore and reinforce the endodontically treated weak tooth structure. Newer tooth-colored posts have improved the esthetics of teeth and have a modulus of elasticity similar to that of dentin [1]. The bonding of the posts to the root canal dentin have always been a challenge due to the innate characteristics of the dentin. Application of exogenous cross-linking agents to several connective tissues is helpful to modify the structures of collagen fibrils, and improve their degradation resistance as well as stabilization that in turn improve the bonding characteristics of the dentin [2]. A natural exogenous cross-linking agent, Proanthocyanidin (PA) has been successfully used in the pretreatment of biological tissues to improve their mechanical properties [3]. Hence the aim of this study is to assess the influence of 6.5 % PA application during bonding procedure on push-out bond strength of flexible glass fiber posts to root dentin using an adhesive luting system

References:
