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Bond Strength and Surface Microhardness of Calcium Silicate-Based Biomaterials

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Dear Editor,

We read the study by Majeed et al. [1] entitled “Push-Out Bond Strength and Surface Microhardness of Calcium Silicate-Based Biomaterials: An in vitro Study” with interest. The authors concluded that “Biodentine and ProRoot MTA showed higher bond strength and microhardness compared to BioAggregate.” There are some concerns on this interesting biomechanics study. First,

while the control of the biomaterial filling technique is important since the strength also depends on the quality of the filling, however, the quality control of the tool for mechanic test has to be mentioned. Second, the effect of any difference on the background strength of the different tested teeth should be discussed. Indeed, in an in vivo situation, there are also other additional factors that affect the strength of the biomaterials such as basic biochemical condition in each individual’s oral cavity [2].

Disclosure Statement

The authors have no conflicts of interest to disclose.

References

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- 2 Zicari F, De Munck J, Scotti R, et al: Factors affecting the cement-post interface. *Dent Mater* 2012;28:287–297.