

选择性酸蚀技术用于断冠再接的研究

陈 晖 黄 晓* 赵是民 汪 俊

(上海交通大学医学院附属第九人民医院儿童口腔科, 上海 200011)

【摘要】目的 探讨选择性酸蚀技术用于断冠再接的效果。**方法** 将 50 颗体外建立冠折模型的人下切牙随机分为 5 组, 组 1 使用 Easy One (EO) 自酸蚀技术再接, 组 2 使用 EO 选择性酸蚀技术再接, 组 3 使用 Clearfil S3 bond (CS3) 自酸蚀技术再接, 组 4 使用 CS3 选择性酸蚀技术再接, 组 5 使用 Single bond 2 (SB2) 全酸蚀技术再接。样本再接后测定剪切力或电镜观察, 计算再接后强度恢复率。**结果** 组 1 与组 2、组 3 与组 4 再接后强度恢复率无显著性差异($P>0.05$)。SB2 用于断冠再接后的剪切力及强度恢复率均最低, 组 5 显著低于组 2 ($P=0.043$) 及组 3 ($P=0.043$)。电镜下, SB2 的粘接界面与 EO 和 CS3 存在差异。**结论** 选择性酸蚀技术的作用受粘接剂及粘接面状态影响, 全酸蚀技术用于断冠再接没有优势。

【关键词】 断冠再接 自酸蚀 全酸蚀 选择性酸蚀

DOI: 10.11752/j.kqcl.2016.03.03

Effect of selective etching technique on tooth fragment reattachment

Chen Hui Huang Xiao* Zhao Shimin Wang Jun

(Department of Pediatric Dentistry, Shanghai Ninth People's Hospital, Shanghai Jiaotong University School of Medicine, Shanghai 200011)

【Abstract】Objective To discuss the effect of selective etching technique on tooth crown fragment reattachment. **Methods** 50 fractured human mandibular incisors were obtained and randomly assigned into 5 groups. G1: reattaching with Easy one (EO) following a self-etch approach, G2: selective enamel etching before application of EO, G3: reattaching with Clearfil S3 bond (CS3) following a self-etch approach, G4: selective enamel etching before application of CS3, G5: reattaching with Single bond 2 (SB2) following a total-etch approach. After reattaching, the fracture resistance was tested and the fracture morphology was observed using SEM. The recovery rate of fracture strength after reattachment (R) was also calculated. **Results** There was no significant difference in the R value between G1 and G2, G3 and G4 ($P>0.05$). Both the fracture resistance and the recovery rate of SB2 had the lowest value. The R value of G5 was significantly lower than that of G2 ($P=0.043$) and G3 ($P=0.043$). SEM photomicrograph of the bonding interface showed different micromorphology between EO and CS3. **Conclusion** The effect of selective etching depended on both the adhesives and the condition of the fracture surface. Total-etch had no superiority on tooth fragment reattachment.

【Key words】 Reattachment of tooth fragment Self-etch Total-etch Selective etching

断冠再接是自体牙原位修复牙体缺损的方法,

其临床应用得益于树脂粘接剂的发展^[1]。自酸蚀树脂粘接剂能获得较高的牙本质粘接强度、术后敏感发生率低, 但在釉质粘接强度及边缘封闭性方面不如全酸蚀技术。而选择性酸蚀技术(selective

* 共同第一作者

基金资助: 上海市科委医学引导项目(编号: 124119B0101)

通信作者: 汪俊, E-mail: wangjun202@126.com