

差异化扫描临床全冠预备体的数字化印模精度比较

袁剑鸣* 许卫星* 唐 颖

(上海市黄浦区第二牙病防治所, 上海 200020)

【摘要】 目的 比较临床全冠预备体石膏模型口内扫描仪数字化印模与口外扫描仪数字化印模精度的差异。**方法** 临床制备全冠患牙 20 例, 牙体预备后取硅橡胶印模并灌注石膏模型, 对预备体模型用临床口内扫描仪和技工室口外扫描仪分别扫描, 获得两组数字化模型, 进行数据转换并保存为 STL 文件。测量两组印模数据的三维差异, 评估不同数字化印模方式之间的精度差异。**结果** 全冠预备体模型的口内数字化印模和口外数字化印模比较, 各观测点间的精度差异没有统计学意义 ($P>0.05$)。**结论** 全冠预备体印模使用口内扫描仪与口外扫描仪形成的数字化印模具有一致性, 提示了影响口内扫描精度的个体差异和总体局限性因素, 为进一步提高临床数字化印模精度给出一个基础性参考。

【关键词】 全冠预备体 数字化印模 扫描 精度

DOI : 10.11752/j.kqcl.2019.02.05

A comparison of digital impression accuracy of clinical crown preparation with differential scanning

Yuan Jianming Xu Weixing Tang Ying

(The Second Stomatological Disease Institution of Huangpu District in Shanghai, Shanghai 200020)

【Abstract】 Objective To compare the difference of digital impression precision between the intraoral scanner and extraoral scanner in the plaster models of clinical full crown preparation. **Methods** Twenty full-crown teeth were clinically prepared. After tooth preparation, the silicone rubber impression was taken and the plaster model was poured into the model. The model was scanned respectively with an intraoral scanner and an extraoral scanner in the laboratory. The three-dimensional difference between two sets of impression and the difference of precision between different impression methods was evaluated. **Results** There was no statistically significant difference in the accuracy between the two observation points ($P>0.05$). **Conclusions** The digital impression mold data by the intraoral scanner was consistent with that by the extraoral scanner in the full crown preparation impression. The results suggest that individual differences and overall limitations might affect the accuracy of intraoral scanning, providing a basic reference for further improving the accuracy of clinical digital impression.

【Key words】 Full crown preparation Digital impression Scanning Accuracy

随着计算机辅助设计与制作技术的快速发展, 口腔临床修复诊疗中, 通过口内扫描仪直接获取

口腔信息制作数字化印模和在口外通过扫描印模和石膏模型制作数字化印模实现精准修复的方法

*: 共同第一作者

基金项目: 上海市黄浦区科委科技项目基金 (编号: NO.HKW201410)

通信作者: 许卫星, E-mail: smlstar868@163.com