

## 2 种根尖定位仪准确性的临床评价

周卓君\* 郭一波\*\* 黄靖\*\*\*

(上海交通大学医学院附属第九人民医院 口腔综合科\*;

上海市口腔医学重点实验室/上海市口腔医学研究所, 国家口腔疾病临床研究中心\*\*;

口腔医学院 口腔解剖教研室\*\*\*, 上海 200011)

**【摘要】目的** 评价2种根尖定位仪的准确性。**方法** 选取因修复需要根管治疗的上前牙, 共40个根管。要求未罹患任何牙体牙髓疾病, 具有正常牙髓活力。局麻下常规开髓, 分别选用第三代电子根管测量仪 ROOT ZX 及第四代产品 VDW Raypex5 测量工作长度。随后插针进行牙 CT 拍摄, 从牙 CT 影像中得到根尖孔位置, 测得工作长度, 并以此作为金标准。引入经典流行病学中对诊断试验评价的方法, 采用 SPSS13.0 软件, 根据测得数据绘制受试者工作特性曲线 (receiver operator characteristic curve, 简称 ROC 曲线), 按曲线下面积, 比较几种诊断试验的诊断效率。**结果** ROOT ZX 和 VDW Raypex5 的准确率分别为 87.5% 和 92.5%。ROC 曲线下面积 ROOT ZX 为 0.489, VDW Raypex5 为 0.505。**结论** ROOT ZX 和 VDW 两代产品都对根管工作长度的测量结果准确、安全、可靠。ROC 曲线是一种全面、准确评价诊断试验有效的方法。

**【关键词】** 根尖定位仪 根管治疗 工作长度 准确性

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## Clinical evaluation of accuracy of two root apex locators

Zhou Zhuojun\* Guo Yibo\*\* Huang Jing\*\*\*

(\*Department of Oral General, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine; \*\*Shanghai Key Laboratory of Stomatology/Shanghai Institute of Stomatology National Center for Oral Diseases Research;

\*\*\*Department of Oral Anatomy, School of Stomatology, Shanghai 200011)

**【Abstract】 Objective** To evaluate the accuracy of two electronic root apex locators under *in vivo* condition. **Methods** A total of 40 single-rooted maxillary anterior teeth, with normal pulp vitality and without any dental diseases, were selected due to prothodontic needs. The pulp chamber was opened by conventional way under local anesthesia. The working length was measured by third generation of electronic root apex locator ROOT ZX, and forth generation VDW Raypex5. The file was then placed into the root canal for CT scan to obtain the position of root apical foramen. The working length was measured and used as gold standard. **Results** The accuracy of ROOT ZX and VDW Raypex5 was 87.5% and 92.5%, respectively. With introduction of diagnostic evaluation method of classical epidemiology, the Receiver Operating Characteristic (ROC) curve was drawn by spss13.0 according to measured data, the area under the curve of ROOT ZX and VDW Raypex5 was 0.489 and 0.505, respectively. **Conclusion** The ROC curve was an effective method for comprehensive, accurate diagnostic

通信作者: 郭一波, E-mail: 15216708007@163.com

黄靖, E-mail: jinghuang7@126.com