利用数字化印模和软件分析上中切牙全瓷冠牙体预备的精度

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【摘要】 目的　利用数字化印模和设计软件对不同工作年限医师预备的上中切牙全瓷冠牙体预备的精度进行分析和评估。方法　在实验用标准牙模上，3 组实验对象（上海第九人民医院口腔修复医师组、临床型研究生组和临床前本科生组）按照统一的牙体预备程序和标准，对右侧上颌中切牙进行全瓷冠牙体预备，利用 Planscan 口内扫描仪获取标准预备体和各实验组的样本数据，量化牙体预备各评价指标，并利用评分软件比较各组样本与标准预备体、各组样本之间的肩台宽度、聚合度以及轴壁高度。采用统计学单因素方差分析及最小显著性差异法（Least significant difference，LSD）多重比较的方法，分析不同分组之间的差异。结果　在肩台宽度与轴壁高度方面，临床经验不尽相同的 3 组在统计学上显示差异有显著性意义（$P<0.05$）。结论　在临床前牙体预备训练中应注意轴壁高度不过度预备，尤其应着重控制肩台宽度预备量的训练。
【关键词】 数字化印模　全瓷冠　牙体预备
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Analysis of the precision of tooth preparation of all-ceramic crown on maxillary central incisor by digital impression and software.

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【Abstract】 Objective　Using CAD/CAM to analyze the precision of tooth preparation of maxillary central incisor all-ceramic crowns performed by students and dentists. Methods　According to the unified tooth preparation procedure and standard, three groups of operators （prosthodontics, clinical postgraduates and preclinical undergraduates from Shanghai Ninth People Hospital） prepared right upper central incisor for all-ceramic crown on tooth model.The data of standard preparation and samples was obtained, the evaluation indicators of tooth preparation was quantified by Planscan, and the shoulder width, axial wall height and taper angle of samples with standard preparation were compared by digital software. Differences of three groups were analyzed by one-way analysis of variance and LSD（least significant difference）. Results　There was significantly statistical difference among three groups in shoulder width（$P<0.05$）and axial wall height （$P<0.05$）Conclusion　Appropriate preparation of axial wall height and shoulder width should get more attention in preclinical training.
【Key words】　Digital impression All-ceramic crown Tooth preparation

　　良好的牙体预备是固定修复的基础[1]，量化牙体预备的各项评价指标是评价牙体预备精度的重要手段，主要包括手工测量方法以及计算机辅助评价方法[2]。其中，计算机辅助方法较于前者准确性更高，实用性更强，操作更方便。近年来出现的计算机辅助评价方法，通过对于预备体形态的三维数字化获取，得到预备体的量化指标。