

·基础与临床研究·

不同根管冲洗液和冲洗方法对粪肠球菌清除作用的体外研究

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【摘要】目的 比较不同冲洗液和冲洗方法对根管内粪肠球菌的清除效果。**方法** 建立 120 颗人完整单根管前磨牙粪肠球菌感染根管模型, 随机分组, 分别采用不同冲洗液 (0.9% NaCl, 0.5% NaClO, 3% NaClO) 及冲洗方法 (注射针头冲洗, 超声荡洗, RinsEndo 系统处理, 超声荡洗协同 RinsEndo 系统联用) 进行根管清理。无菌吸潮纸尖取样, 平板菌落计数法计算 CFU 值, 计算细菌清除率, 运用 SPSS 22.0 软件进行统计分析, $P < 0.05$ 时差异具有统计学意义。**结果** 使用 0.9% NaCl 及 0.5% NaClO 冲洗液时, 注射针头冲洗组细菌清除率明显低于超声荡洗及 RinsEndo 系统处理组 ($P < 0.001$); 使用 3% NaClO 冲洗液的一组不同的冲洗方法, 细菌清除率的差异无统计学意义 ($P = 0.556$)。而无论采用哪种冲洗方法, 3% NaClO 溶液的细菌清除效果均优于 0.5% NaClO 溶液和 0.9% NaCl 溶液 ($P < 0.001$)。**结论** 不同根管冲洗液在一定程度上会影响根管冲洗方法对根管内粪肠球菌的清除效果。

【关键词】 根管冲洗 次氯酸钠 粪肠球菌 生物膜

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Efficiency of different rinsing fluids and irrigation techniques on reduction of
Enterococcus faecalis in root canals *in vitro*

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【Abstract】Objective The purpose of this study was to observe the bactericidal effect of different irrigation techniques and rinsing fluids on *Enterococcus faecalis* in root canals. **Methods** One hundred and twenty intact human single canal premolar teeth were selected to build models of *Enterococcus faecalis* infected root canals. All the teeth were randomly and averagely divided into 12 groups. Bacteria samples of root canals were collected by using sterile paper point and then were cultured onto culture dishes. In the end, the CFUs were counted, and the clearance of *Enterococcus faecalis* was calculated to evaluate the efficiency of different irrigation techniques on the reduction of *Enterococcus faecalis* in root canals. The software SPSS 22.0 was applied for the statistical analysis. There was significant difference when $P < 0.05$. **Results** When 0.9% NaCl and 0.5% NaClO was used as the rinsing fluid, the clearance of *Enterococcus faecalis* in the group using Syringe needle has much

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