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Study of Oral Vaccine Against Dental Caries of Gene Recombination in Streptococcus Lactis

I. Cloning of Streptococcus Lactis by Recombinant Plasmid of Streptococcus Mutans Structural Gene

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Abstract

Bases on the plasmids pPC41 containing the structural gene (pac) and E. coli-S. lactis shuttle vector pSA3 were obtained. The fragment containing the pac gene was isolated and it was ligated to vector. The recombinant was used to transform S. lactis LM0230 cells. The recombinant S. lactis strains HL45, HL102 and HL107 et al, which carries the structural gene for a surface protein antigen (PAC) from S. mutans was constructed for development of an oral vaccine against dental caries.

珊瑚人工骨义眼台制作方法及临床应用

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我科自 1991 年开始研制珊瑚人工骨义眼台, 临床应用 16 例患者眼球摘除后眶内植入体, 术后随访观察 6~18 个月, 均取得满意效果, 初步报道如下。

1 材料和制作方法

采用海南岛红焦珊瑚为原料, 经过理化处理后制成珊瑚人工骨, 用口腔科打磨机经特殊工艺制成直径 14 mm, 16 mm, 18 mm 圆球形, 三种不同规格, 重量约 3~4.5 g, 然后细磨抛光。用 5% 次氯酸钠浸泡, 置 85℃ 干燥箱内 1 h 烘干, 高压消毒备用。

2 体会

珊瑚人工骨近年来国内外学者的研究资料及笔者经动物实验初步临床应用观察表明, 该人工骨具有良好的生物相容性和骨亲和性^[1]。珊瑚属种类繁多, 其珊瑚

骨的微结构和强度也不同。作者选用红焦珊瑚为原料制成的人工骨义眼台, 其重量轻, 孔径大于 150 μm, 具有组织长入理想的孔径。质地较脆, 抗压强度与人体骨质相差较大, 作为美容植入体不需承受较大压力, 在修复中起着支架作用。是制作义眼台的理想的材料。

通过 16 例临床术后观察表明, 该人工骨具有良好的生物相容性, 无排斥反应, 无毒性和过敏原性。义眼活动度良好, 与健侧对称, 外形美观。具有材料来源丰富, 义眼台重量轻, 易制作及塑形, 支撑效果准确可靠, 消毒方便等优点。

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