·基础与临床研究·

脂肪干细胞移植治疗化疗导致的口腔黏膜炎的初步观察

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【摘要】目的 探讨脂肪干细胞 (ADSCs) 移植治疗化疗导致的口腔黏膜炎的效果。方法 将 10 只金黄地鼠随机分为 2 组,制备化疗性金黄地鼠口腔黏膜炎模型,实验组(M 组)于金黄地鼠口腔颊囊溃疡周边局部多点注射被标记的 ADSCs+PBS 细胞混悬液;对照组(N 组)于相同部位注射等体积 PBS。每天观察记录金黄地鼠口腔黏膜情况,比较实验组和对照组颊囊粘膜愈合情况。分别于实验第 9 天、第 14 天处死实验动物,制备组织标本,行大体观察、HE 染色、冰冻切片、荧光显微镜下观察。利用 SAS 软件对数据进行分析。结果 大体观察及组织学染色显示 M 组黏膜愈合程度及质量明显优于 N 组;荧光显微镜观察显示移植一周后 CM-Dil 染色的 ADSCs 能在该部位定居且存活良好。结论 脂肪干细胞移植对口腔黏膜溃疡具有一定的促愈作用,可以快速治疗化疗导致的口腔黏膜炎。

【关键词】 脂肪干细胞 化疗 口腔黏膜炎 CM-Dil 探针

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Preliminary observation on adipose-derived stem cells transplantation for treating chemotherapy-induced oral mucositis

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(ADSCs) transplantation on treating chemotherapy-induced oral mucositis (OM). Methods Ten Golden Syrian hamsters were randomly divided into two groups and the animal model of chemotherapy-induced OM was prepared. Group M: the labeled ADSCs by the CM-Dil probe in PBS suspension were locally injected into the cheek pouch around the ulcer at multiple points; Group N: the PBS with the same volume were injected into the same position. The oral mucosa of the golden hamster was observed and recorded every day and the healing situation was compared between the experimental group and the control group. All the experimental animals were sacrificed after the 9th and 14th days. Tissue samples were observed by gross observation, hematoxylineosin (HE) staining, frozen sections and fluorescence microscopy. The results were analyzed by SAS software.

Result Gross observation and HE staining showed that the degree and quality of mucosal healing of oral ulcer

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