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比较两种CT引导下兔肺微小移植瘤模型建立方法

Comparison of two methods for CT-guided establishment of small pulmonary transplanted tumor in rabbit models

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中文摘要:

目的 探讨兔肺微小移植瘤模型的建立方法。方法 将30只新西兰大耳白兔分为实验组(20只)和对照组(10只),在CT引导下分别经皮套管针种植经明胶海绵包裹和未经明胶海绵包裹的VX2瘤块。术后1周起每3天行肺部CT扫描,观察移植瘤生长情况,于CT图像上测量移植瘤最大径,最大径5~10 mm、病变单发且不伴转移者定义为微小移植瘤,术后1周仍存在胸腔积液者为有胸膜转移。结果 实验组和对照组肺内单发成瘤率和胸膜转移率分别为95.00%(19/20)、5.00%(1/20)和50.00%(5/10)、50.00%(5/10),差异均有统计学意义(P均<0.05)。CT测量移植瘤最大径分别为(7.84±0.67)mm和(7.94±0.42)mm,大体标本测量分别为(8.00±0.68)mm和(8.02±0.47)mm,差异无统计学意义(P均>0.05)。结论 CT引导下种植明胶海绵包裹VX2瘤块是建立微小肺癌模型较为理想的方法,与传统种植方法相比成功率高、定位准确、操作简便。

英文摘要:

Objective To explore the method for establishment of small pulmonary transplanted tumor in rabbit models. **Methods** Thirty New Zealand rabbits were divided into experiment group (n=20) and control group (n=10), in which tumor tissue blocks parceled by gelatin sponge or not were implanted into the lungs using CT-guided trochar implantation technique, respectively. CT scanning of the lung was performed to observe the tumor growth every three days since 1 week after operation. The maximum diameter of tumor was measured in CT image. Small transplanted tumor was defined as the one which had a diameter of 5—10 mm and was solitary without metastasis. Pleural effusion still existed 1 week after operation was considered as pleural metastasis. **Results** The unifocal tumor formation rate and pleural metastasis rate of experiment group and control group was 95.00% (19/20), 5.00% (1/20) and 50.00% (5/10), 50.00% (5/10), respectively (both P<0.05). The maximum diameter of tumors in experiment and control group measured from CT was (7.84±0.67) mm and (7.94±0.42) mm, measured from gross tumor was (8.00±0.68) and (8.02±0.47) mm, respectively (both P>0.05). **Conclusion** Implantation of VX2 tumor tissue block parceled by gelatin sponge is an ideal method for establishment of small pulmonary cancer model in rabbits, which has high success rate, accurate location and simple operation.

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