

研究简报

^{125}I 标记重组MIF在炎症模型小鼠体内的生物分布

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摘要 摘要: 目的:初步评价 ^{125}I 标记巨噬细胞移动抑制因子(MIF)在炎症显像中的应用价值。方法: Iodogen法制备 ^{125}I -MIF, 研究其稳定性、特异性及在炎症模型小鼠体内的生物学分布规律。结果: ^{125}I -MIF的标记率为96.5%, 室温下48小时内标记化合物的生物学性质稳定。体内分布表明 ^{125}I -MIF主要由肝脏代谢, 经肾脏排泄, 血液清除较快。尾静脉注射 ^{125}I -MIF 0.5、1、6、24小时后, 炎症肢体(靶)与对侧健肢(非靶)的%ID比值(T/NT)值分别为1.42、1.35、2.18和2.05。结论: ^{125}I -MIF具有在活体内炎症定位导向能力, 但在早期优越性不明显, 6小时后效果较佳, 对隐匿性或亚急性炎症病灶的诊断有潜在的临床价值。

关键词 [巨噬细胞移动抑制因子](#) [炎症](#) [生物学分布](#) [代谢](#)

分类号

Bio-distribution of ^{125}I labeled macrophage migration inhibitory factors in inflammatory model of mice

Abstract Abstract: Objective: To evaluate the usefulness of ^{125}I labeled macrophage migration inhibitory factors (MIF) for the scintigraphic imaging of inflammation. Methods: ^{125}I -MIF was radio-iodinated by Iodogen solid labeling method. The stability of ^{125}I -MIF and its bio-distribution in inflammatory model of mice were studied. Results: The labeling rate of ^{125}I -MIF was 96.5%. It was stable within 48 hours at room temperature. The bio-distribution results showed that the ^{125}I -MIF was metabolized by the liver, the radioactivity clearance mainly happened in the kidney and the speed of the blood clearance is rapid. After caudal vein injection with ^{125}I -MIF, the ratio of %ID between inflammatory limb (target) and contralateral healthy limb (non target)(T/NT) were 1.42, 1.35, 2.18 and 2.05 at 0.5, 1, 6, 24 hour respectively. Conclusion: ^{125}I -MIF has the capability of locating the inflammatory foci. The advance of it is more obviously at the late stage than at the early stage. The ^{125}I -MIF may be a potential agent for the diagnosis of concealed and subacute inflammatory disease.

Key words [Macrophage migration inhibitory factors](#) [Inflammation](#) [Bio-distribution](#) [Metabolism](#)

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