99Tcm-MDP全身骨显像与全身低剂量CT诊断多发性骨髓瘤的对比研究

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Title: **Comparative study of 99Tcm-MDP whole body bone imaging and whole body low dose CT in multiple myeloma**

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关键词: 多发性骨髓瘤; 放射性核素; 全身骨显像; 全身低剂量CT; 诊断价值

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摘要: 目的：通过分析多发性骨髓瘤99Tcm-MDP全身骨显像与全身低剂量CT的影像表现，探讨和比较两者对多发性骨髓瘤(multiple myeloma，MM)辅助诊断、疗效监测和预后判断的应用价值。方法：回顾性分析经骨髓穿刺或手术病理证实的37例MM SPECT全身骨显像和全身低剂量CT的影像表现。结果： 37例MM患者同时行全身骨显像检查及全身低剂量CT检查，两者的阳性率分别为91.9%(34/37)、83.8%(31/37)，差异无统计学意义(P>0.05)；SPECT联合全身低剂量CT的阳性率为100%(37/37)，较单纯SPECT及全身低剂量CT组差异均有统计学意义（P<0.05），两种方法的总一致性为86.5%。37例MM患者行SPECT检查，发现骨损害总病灶数379个，同期行全身低剂量CT检查，发现骨损害总病灶数189个，全身骨显像显示肋骨病灶的阳性率高于全身低剂量CT（P<0.05），全身低剂量CT发现颅骨（P<0.05）、四肢骨（P<0.05）和锁骨（P < 0.05）病灶阳性率高于全身骨显像；而脊椎骨、骨盆、胸骨、肩胛骨在全身骨显像和全身低剂量CT上显示的病灶数目无明显差异（P>0.05）。结论：全身骨显像和全身低剂量CT对MM的诊断各有优势，均有一定的临床价值，可作为MM患者的常规检查项目。

Abstract: Objective：To analyze the imaging of multiple myeloma and low dose CT，and the value of the two methods in the diagnosis of multiple myeloma（MM）.The monitoring of curative effect and the judgement of prognosis were discussed and compared.Methods：The imaging findings of 37 patients with multiple myeloma confirmed by bone marrow puncture or surgery and pathology were analyzed retrospectively.Results：In 37 patients with MM underwent SPECT whole body bone imaging and whole body low-dose CT，the positive rates were 91.9%(34/37) and 83.8%(31/37)，respectively.The difference was not statistically significant(P>0.05).The positive rate of SPECT combined with low-dose CT was 100%(37/37)，which was statistically significant compared with SPECT and low-dose CT(P<0.05).The overall agreement between the two methods was 86.5%.A total of 379 patients with MM underwent SPECT and 379 total lesions of bone damage were found.At the same time，low-dose CT examination showed that there were 189 total lesions of bone damage.The positive rate of rib lesions in whole body bone imaging was higher than that of whole body low-dose CT(P<0.05).The positive rates of lesions which were found by whole-body low-dose CT in skull(P<0.05)，limb(P<0.05)，clavicle(P < 0.05) were higher than that in whole body bone imaging，and the number of lesions in vertebrae，pelvis，sternum，scapula on whole body bone imaging and whole body low dose CT had no significant difference(P>0.05).Conclusion：The whole body bone imaging and low dose CT have advantages in the diagnosis of multiple myeloma，and have certain clinical value.They can be used as a routine examination for patients with multiple myeloma.

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