

Technetium-99m HMPAO labeled leukocytes in inflammation imaging

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Technetium-99m-HMPAO (Tc-99m-HMPAO) labeled leukocyte imaging was carried out in 19 patients at 3-5 hr after reinjection. There were no side effects noted. Tc-99m leukocyte images showed gall bladder, colon, kidney, and urinary bladder activity in normal distribution as a result of excretion of the eluted Tc-99m complex. They yielded a sensitivity of 93%, a specificity of 100% and an accuracy of 95%. They were correctly positive in 14 out of 19 cases. But one false negative case was seen in a patient with pyonephrosis showing a lack of renal function with decreased renal blood flow. It was concluded that they have some advantages over In-111 leukocyte images, but we have to consider the fact that the ureteral obstruction or the lack of renal function with decreased renal blood flow may result in a false positive or a false negative case.

Key words: Tc-99m-HMPAO, labeled leukocytes, inflammation