Technetium-99m pyrophosphate tomogram of nontransmural myocardial infarction: a case report

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Single-photon emission computed tomography (SPECT) with $^{99m}$Tc-pyrophosphate ($^{99m}$Tc-PYP) has been reported to be useful in the detection and localization of acute nontransmural infarctions. Localized uptake of $^{99m}$Tc-PYP has been shown in patients with nontransmural infarction in these studies. It is likely, however, that anatomically transmural infarctions could be mislabelled as nontransmural infarctions, since the absence of new abnormal Q waves has been used in differentiating between nontransmural and transmural infarctions. We report a case of relatively diffuse nontransmural infarction demonstrated by a semicircle of $^{99m}$Tc-PYP activity which significantly overlapped $^{201}$Tl uptake on the SPECT study.

Key words: Nontransmural myocardial infarction, SPECT, Tc-99m pyrophosphate