

Tc-99m 거대응집알부민을 이용한 폐관류 스캔에서 관찰되는 다발성 열소

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Hot Spots on Tc-99m MAA Perfusion Lung Scan

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Abstract

A 61 year-old woman underwent perfusion and inhalation lung scan for the evaluation of pulmonary thromboembolism. Tc-99m MAA perfusion lung scan showed multiple round hot spots in both lung fields. Tc-99m DTPA aerosol inhalation lung scan and chest radiography taken at the same time showed normal findings (Fig. 1, 2). A repeated perfusion lung scan taken 24 hours later demonstrated no abnormalities (Fig. 3).

Hot spots on perfusion lung scan can be caused by microsphere clumping due to faulty injection technique or by radioactive embolization from upper extremity thrombophlebitis after injection. Focal hot spots can signify zones of atelectasis, where the hot spots probably represent a failure of hypoxic vasoconstriction.

Artifactual hot spots due to microsphere clumping usually appear to be round and in peripheral location, and the lesions due to a loss of hypoxic vasoconstriction usually appear to be hot uptakes having linear borders.¹⁻³ Although these artifactual hot spots have been well-known, we rarely encounter them. This report presents a case with artifactual hot spots due to microsphere clumping on Tc-99m MAA perfusion lung scan. (**Korean J Nucl Med 2001;35:288-290**)

Key Words: Artifact, Pulmonary hot spot, Tc-99m MAA, Lung scan

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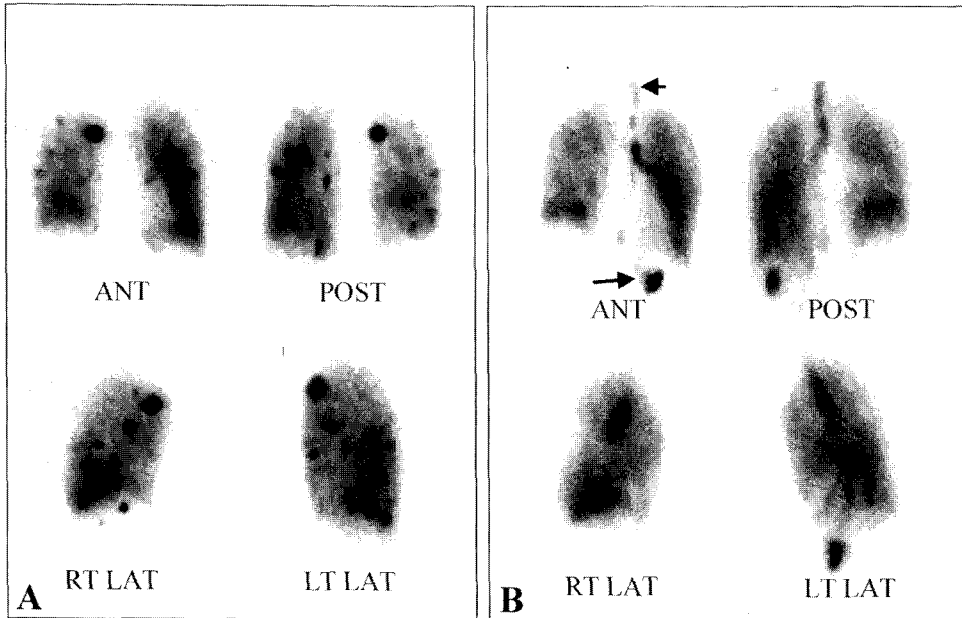


Fig. 1. The multiview images of Tc-99m MAA perfusion lung scan (A) show multiple round hot spots in both lung fields. Tc-99m DTPA aerosol inhalation lung scan (B) taken at the same time shows normal findings in both lung fields. Small and large arrows indicate the radioactive aerosol in the trachea and the stomach, respectively.

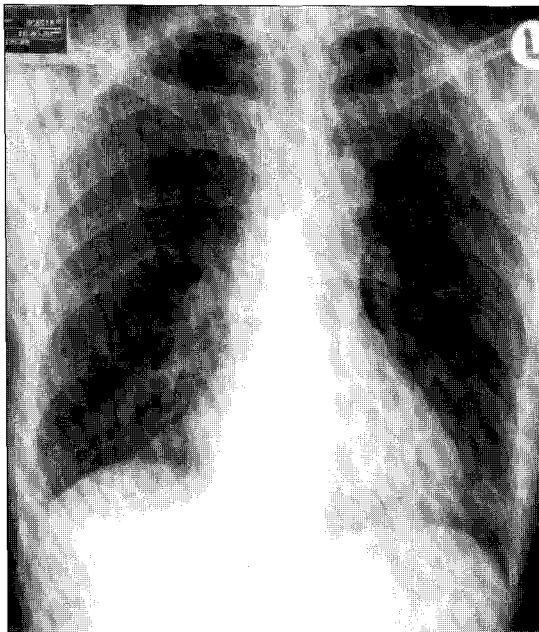


Fig. 2. The chest radiography shows normal findings

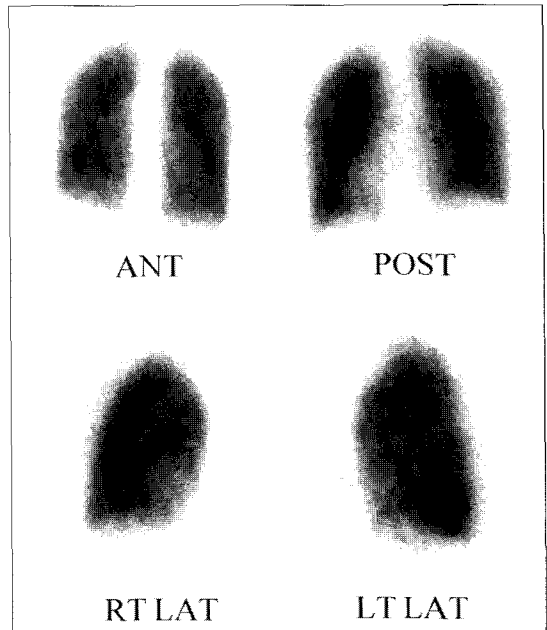


Fig. 3. The repeated perfusion lung scan taken 24 hours later demonstrates no abnormalities.

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