Bone scanning in patients with pleural effusion—Experience in 76 cases

Shigeru Kosuda,* Kunihiro Yokoyama,** Iku Nishiguchi,* Etsuo Kunieda,**
Atsushi Kubo* and Shozo Hashimoto*

*Department of Radiology, Tokyo Metropolitan Komagome Hospital
**Keio University Hospital, Tokyo, Japan

Seventy-six patients with malignant or benign pleural effusion were studied to determine the incidence of accumulation of $^{99m}$Tc-MDP in relation to effusion, and reveal the mechanism. Of 76 patients, 46 (61%) were found to have diffuse uptake of $^{99m}$Tc-MDP in the hemithorax, with almost the same positive rate in malignant and benign effusions, i.e. 62% and 57%, respectively. Of 46 patients, 32 (70%) showed diffuse, slight accumulation in the hemithorax, and the positive rate had a tendency to be higher with the increase in the effusion volume.

We are convinced that the major mechanism of unilateral intrathoracic accumulation of $^{99m}$Tc-MDP in pleural effusion is a passive transudation.

Key words: bone scan, pleural effusion, $^{99m}$Tc-MDP, $^{67}$Ga citrate