Bone scintigraphy is widely used to detect bone metastasis owing to its high sensitivity, but solitary focus of increased uptake often causes diagnostic problem because of its low specificity. The purpose of this study was to assess the significance of solitary hot spot detected in patients with extraskeletal malignancies. We reviewed 1,167 consecutive bone scintigraphies of patients with history of lung, breast or prostatic cancer. There was 185 bone scans showing solitary hot spot (lung: 121, breast: 36, prostate: 28). Of the solitary hot spots, 30 (24.8%) in lung cancer, 8 (22.2%) in breast cancer, and 4 (14.3%) in prostatic cancer were a result of metastatic disease. There was no significant difference in the frequency of bone metastasis according to the site of primary tumor. It was relatively higher in the location of pelvis, scapula and thoracic spine. Clinical symptoms, particularly local bone pain, were helpful to diagnose the solitary hot spot.

**Key words:** Bone scintigraphy, $^{99m}$Tc-HMDP, Solitary hot spot, Bone metastasis.