Intense accumulation of indium-111 leukocytes in peritonitis carcinomatosa

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In order to detect the infectious foci in a case of terminal recurrent cancer of the sigmoid colon with intense inflammation, In-111 oxine leukocyte scintigraphy was performed. Leukocytes labeled with In-111 oxine quickly localized within the region of peritonitis carcinomatosa and could be imaged after 4 hours. With time, high activity appeared in this area. And 48 hours after injection, the large intestine was clearly seen. However, no activity was seen in the main recurrent tumor. This suggested that the labeled leukocytes had accumulated in regions of inflammation rather than in malignant tissue.

When performing In-111 leukocyte scintigraphy for diseases in which tumor cells and inflammation are mixed, distinguishing the two components is particularly important, and time-sequential scanning is very useful.

Key words: In-111 oxine, In-111 leukocyte, Infection, Peritonitis carcinomatosa, Tumor