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A case of tuberculous peritonitis monitored by gallium-67 scintigraphy

Shuhei Nishiguchi,* Susumu Shiomi,** Hirotaka Ishizu,** Hiroko Kurooka,* Yoshinori Iwata,* Nobumitsu Sasaki,* Motoharu Tanaka,* Hiroki Sakaguchi,* Joji Kawabe** and Hironobu Ochi**

*Third Department of Internal Medicine and **Division of Nuclear Medicine, Osaka City University Medical School

An 18-year-old man was admitted to our hospital for further examination of fever of unknown origin and ascites. Ga-67 scintigraphy revealed diffuse increased uptake throughout the abdomen. He was diagnosed with tuberculous peritonitis and began the treatment for tuberculosis (rifampicin, 450 mg/day orally and isoniazid, 300 mg/day orally, and 0.75 g of streptomycin by intramuscular injection 2 times a week). One year after starting the treatment, Ga-67 scintigraphy revealed accumulation of radioactivity in the upper abdomen, but the diffuse accumulation in the abdomen decreased. A specimen obtained by tumor biopsy under ultrasonic guidance revealed a tuberculous granuloma. Percutaneous injection was performed in the tumor with 1.0 g of streptomycin. On Ga-67 scintigraphy performed 2 weeks after the injection of streptomycin, the accumulation of radioactivity in the upper abdomen had disappeared. These findings suggest that Ga-67 scintigraphy is useful for diagnosis and observation during treatment of tuberculous peritonitis.

Key words: tuberculous peritonitis, gallium-67 scintigraphy, fever of unknown origin