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On clinical usefulness of Tl-201 scintigraphy for the management of malignant soft tissue tumors

Shoji Terui, Takashi Terauchi, Hiroyuki Abe, Hisatoshi Fukuma, Yasuo Верри, Koichi Chuman and Ryohei Yokoyama

Divisions of Nuclear Medicine and Orthopedics, National Cancer Center Hospital

The purpose of this study was to investigate Tl-201 as a tumor scanning agent in patients with malignant soft tissue sarcomas and to establish the sensitivity of this type of scintigraphy concerning local recurrences or metastases that may remain clinically suspected. Seventy-eight patients with malignant soft tissue sarcomas and 22 with benign soft tissue tumors were studied. Of these 78 malignant soft tissue sarcomas patients, the sensitivity of Tl-201(81.2%) was higher than that of Ga-67 (68.8%). Thirty-three out of 78 patients received a total of 95 consecutive scintigraphic follow-up examinations. Therapeutic effects was assessed by comparing the results of Tl-201 examinations with the clinical findings. Of these 33 patients, the therapeutic effects observed were as follows: complete remission 1, partial remission 8, progress of disease 1, and no remarkable change 23. Tl-201 scintigraphy has proved itself very useful not only in clinically detecting the malignant soft tissue sarcomas and in assessing therapeutic effects on these diseases, but also in assessing the follow-up patients with malignant soft tissue sarcomas.

Key words: neoplasm, soft tissue sarcomas, radionuclide diagnosis, Tl-201 scintigraphy, Ga-67 scintigraphy