X. Tumors

Parasternal Lymph Node Metastasis of Breast Cancer
Diagnosing By Radio-Colloid

S. Matsuo, T. Inoue, M. Iwado, T. Tomori, K. Sakuno, K. Nakashima
and Y. Yamamoto

Department of Surgery, Okayama University Medical School, Okayama

The surgery of breast cancer is to a large extent the surgery of lymphatics. Turner-Warwick and Halsell et al. studied the lymphatics of the breast by vital dye staining and radiography. Recently, Schenck reported about parasternal scintigram by radiogold colloid. The diagnosis of parasternal metastasis is difficult by internal mammary arteriography. \(^{199}\)Au-colloid for parasternal scintigram is useful. The diagnosis was determined by comparing with the spots of normal side to tumor side. Cold spot of tumor side is to be positive metastasis, and warmer or hot change than normal side is to be suspicious metastasis. The density of spots is usually warmer than normal side after biopsy, and the histological diagnosis was reticulosis or follicular hyperplasy or histiocytosis. Warm or weak spot than normal side existed sometimes cancer metastasis. In these diagnosis, normal was all negative metastasis, suspicious was 64.7% of metastasis, and positive was 64.3% of metastasis. In Stage I group, parasternal metastasis was 22.2% of positive, and in Stage III group, supuralavicular metastasis was 22.2%. Therefore, the removal of parasternal lymph node for Stage I, and the supuralavicular lymph node removal for Stage III is to be emphasised important for radical mastectomy.

Scanning of Malignant Tumors with \(^{131}\)I-Labelled Fibrinogen

I. Tatsuno

Department of Radiology, Kanazawa National Hospital, Kanazawa

For the purpose of the field collimation of radiation treatment, sometimes scintiscanning was applied. Generally, malignant tumors were delineated as negative in the scintigram. On the other hand, brain tumor, some types of thyroid cancer and bone tumors were delineated as positive. Positive delineation was more desirable than negative. We were investigating the positive delineation of tumor by scanning technic aiming more easy and exact field collimation.

The affinity of \(^{131}\)I-fibrinogen for the malignant tumor has been expected and this report presents the experience delineating human tumors using \(^{131}\)I-fibrinogen.

One mCi of \(^{131}\)I-fibrinogen was administered intravenously to each of 24 patients with malignant tumors, and they were scanned from 4 to 72 hours.

Positive delineation of the tumor was successful in cases of 3 cancers of maxillary sinus, thyroid cancer, metastasis of the right upper extremity from seminoma, myosarcoma of the right femur, metastatic focus of the