OBSERVATIONS ON THE LYMPH FLOW IN THE LOWER EXTREMITY USING Tc-99m LABELED HUMAN SERUM ALBUMIN

The conclusions are as follows: The lymph flow in lower extremity of DM reduced and do not be accelerated by hyperthermia. RI-lymphography using Tc-99m HSA is a useful method for study the lymph dynamics.

THE INFLUENCE OF HYPERFERREMIA ON SOME SCINTIGRAPHY

Elevation of the level of serum iron gives us some abnormal RI distribution image on several scan. Abnormal RI distribution images in Ga scintigraphy and Bone scintigraphy were experienced in our instrument, which were caused by hyperferremia. On Ga scintigraphy, 38 cases of decreased physiological hepatic uptake and 10 cases of increased bone accumulation were observed. On Bone scintigraphy, 1 case of diffuse increased hepatic uptake and 10 cases of increased diffuse renal uptake, so called "Hot kidney sign" were recognized. Three factors of hyperferremia such as administration of overloaded iron and combined chemotherapy and liver desfunction were discussed.

The relationship between abnormal RI distribution pattern and change of serum iron level in cases of combined chemotherapy were also discussed.

DUAL SCINTIGRAPHY USING Ga-67 AND Tc-99m-rhenium (Tc-Re) are useful in making a diagnosis of malignant lymphoma. However, it is sometimes difficult to precisely evaluate findings in each of them because Ga scintigram shows an accumulation of radioactivity in the region of inflammation or neoplasm, and Tc-Re scintigram reveals a defect in the region anomaly or neoplasm. We have then developed a new dual tracers scintigraphy using Ga and Tc-Re, and performed it in patients with malignant lymphoma and metastasis of neoplasm to the lymph nodes. In the patients with lymphoma, a diagnosis could be made on the basis of both positive and negative images which were obtained with Ga window and Tc window respectively. In addition, it could disclose extranal and mediastinal lesions of lymphoma that could not be visualized in lymphangiography. On the other hand, it was possible to distinguish the findings due to lymphoma from those due to metastatic lesion because image obtained using Tc window indicated congestion of lymphatic flow in the region peripheral to the lesion and local findings. These results suggest that the dual tracers scintigraphy is superior to Ga or Tc-Re scintigraphy and is supreme compared with lymphangiography.