

268

RI-LYMPHANGIOGRAPHY WITH Tc-99m-MDP WITH SPECIAL REFERENCE TO DYNAMIC OBSERVATION OF LYMPH FLOW. H.Kobayashi, K.Senda, T.Sasaki, A.Mishima, K.Ohara, K.Matsubara, O.Kai, S.Mashita, T.Ishiquchi, S.Ohshika, Y.Kodama, S.Okao, A.Ohno, T.Abe, S.Sakuma. Dept. of Radiology, Nagoya University School of Medicine. Nagoya

1) 0.1 mCi of Tc-99m-MDP was injected intracutaneously in dorsum pedis. R.I. activity of the area injected was measured in a period of 30 seconds. 4 cases of hysterectomied uterine cancer and 4 cases of lung cancer were examined. Decay curve of R.I. activity showed two components, and the approximate expression could be formulated the following:

$$f(t) = \alpha \exp(-0.693 \cdot t/T_1) + \beta \exp(-0.693 \cdot t/T_2)$$

where α , β are extrapolation number and T_1 , T_2 are half time.

2) ROI was selected in the region of the groin, and measured R.I. activity after intracutaneous injection of 2 mCi Tc-99m-MDP in the dorsum pedis. 3 cases of panhysterectomied uterine cancer, 8 non-operation primary irradiation cases of uterine cancer and 4 cases of other disease were examined. In the hysterectomied cases R.I. activity reached to peak much slower than in the primary irradiation cases.

270

INFLUENCE OF THE CATHETER-TOP-POSITION UPON THE DISTRIBUTION PATTERN OF CONTINUOUS INTRA-ARTERIALY INFUSED CHEMOTHERAPEUTIC AGENT. H.Ichinohe, Serious Diseases Institute, Kosei Hospital, Kuroishi-shi.

The whole body scanning showed the distribution pattern of infused drug in continuous intra-arterially infused chemotherapy by using a gamma camera and infused RI(Tc-99m MAA) from catheter. I measured the whole body scanning counts without shield(A) and with lead shield(B) on ROI and natural back ground counts(BG). Then I calculated the distribution-ratio on ROI as following. $(A-B/A-BG) \times 100(\%)$. It was easy to find a certain relation between the catheter-top-position and the distribution-ratio. As a result of investigating data, there were about 4 catheter-top-positions in aorta. Case by case, we putted the catheter-top in better position and prevented technical side effects and measured roughly total dose on ROI.

References

- 1) T. ISHIKAWA, et all, Side effects by continuous intra-arterial infusion chemotherapy, The Cancer and Chemotherapy, 4, 142, 1977.
- 2) H. ICHINOHE, et all, Technique for precise positioning of the prolonged arterial infusion catheter by radioisotope., Radioisotopes, 27, 35, 1978.