

twenty-four to forty-eight hours after injection.

Clinical use of radiolymphography utilizing colloidal ^{198}Au have been studied and discussed in the patients with cancer of the cervix.

The clinical evaluations of this study were as follows:

1) The pelvic-abdominal ^{198}Au lymph scan shows good visualization of the inguinal, iliac and periaortic chain of activity, that is a useful method for the detection of the lymphatic abnormality. A good correlation is found be-

tween the lymph scan, the contrast lymphogram and the patient's clinical status. The lymph scan, however, offers less morphological information that is obtained from the oil lymphogram.

2) The intralymphatic administration of radiation dose of RI can be used as a therapeutic adjunct in small disseminated nests of early metastasis. The irradiation effect, however, is not warranted in large metastatic nodes. In the present time, this method is thought, therefore, to be supplementary for external and intracavitary irradiation.

Radiolymphography

Y. SAITO

Dept. of Radiology, Tottori University School of Medicine, Tottori

Radiolymphography with ^{198}Au -colloids injected subcutaneously in the bilateral dorsi of foot were performed in the patients with uterine cancer. ^{198}Au -colloids were transported by lymphatic system and deposited in the lymphnodes (mainly inguinal, iliac and paraortic) within 24 hours, though about 30~70% of ^{198}Au remained around the injected site, and these percentages represented roughly the grade of retention of lymphatic drainage due to involvement of lymphnodes.

Linear scanning was performed upward from the injected site. Some peaks of activity curve were revealed within 4 hours p.i. in some cases, but these peaks reached maximum usually 24 hours p.i.

In cases with edema of lower extremity due to cancer invasion, we observed the corresponding changes of activity curve, elevated curve on the site of edema and decreased peak on the involved nodes. Scintigraphy, performed usually 24 hours p.i. (each 50~100 μCi) reveal lymphnodes, but less accurately than roentgenologic lymphography does, because radiolymphography demonstrates no details of the structure nor small metastatic lesion of lymphnodes. By serial linear scanning in the elapse of time after injection of ^{198}Au , it will be possible to estimate somewhat dynamics of lymphatic system. But radiolymphography has the advantage, easily to be performed and to be repeated in the same patient.

Radiation Dose to the Gonads and Fetus Due to Radioisotope Examination in Obstetrics and Gynecology

Y. ANNO

Dept. of Radiology, Tottori University School of Medicine, Tottori

Risk of radiation due to radioisotope (RI) examination in obstetrics and gynecology should be discussed not only somatically, but also genetically. Inquiry was sent to the

hospitals in Japan about the numbers of cases, age distribution of them and individual dose of RI for examination in these fields during the period of 1967 and the first half