

## The diagnosis of the Esophageal Cancer Using Radioactive Phosphorus

M. ENDO

*Institute of Gastroenterology, Tokyo Women's Medical College, Tokyo*

The diagnosis of the esophageal cancer using radioactive phosphorus has been carried out in ordinary examination. The recent detector is a semi-conductor one. The detectors are 3 mm and 2.5mm in size. The later one is possible to be used with the conventional esophagofiberscope. In measuring of  $^{32}\text{P}$  up-take in the esophageal lesion, both the pull-out method and the method under direct vision have been performed usually. The examination has been applied to 245 cases. 191 cases were esophageal cancer and some cases of other esophageal diseases were also performed to make the differential diagnosis. The method under direct vision was carried out in 180 cases

(73%) and the false negative cases were seen in 2.2%.

The pull-out method was performed in 65 cases and the false negative cases in 11%. But the false positive cases were not seen in both methods. Five of the cases of the esophageal cancer were the early esophageal cancer. The uptake ratio in one case was on the boaderline and those of other cases were in the malignant ratio. The method under direct vision has some superiorities comparing to the pull-out method because of the exactness, the possibility to find small lesions and the decrease of false negative cases.

## Clinical Evaluation of Scanning of the Liver for the Patients with Advanced Carcinoma of the Stomach

K. WATANABE, M. INAKURA, K. KAWAHIRA, C. NAKAYAMA and H. TERASHIMA

Today, many cases of carcinoma of the stomach are treated surgically in the early stage by the improvement of diagnostic technique.

However, it is also not infrequent to see the patients with advanced carcinoma of the stomach in which has often metastasis to the liver in clinic. One of the indispensable things for stomach surgery is to know whether these patients have hepatic metastases or not.

One of the approaches to this problem is to employ scanning of the liver. The present study was undertaken in order to correlate both of scintigram and macroscopic findings of the liver in the patients of carcinoma of the stomach.

### Materials:

Scanning of the liver of 1,397 cases was performed from January 1968 to June 1971 in our

department. 206 of these cases were received scanning of the liver as the preoperative examination of carcinoma of the stomach. Materials of this study were 150 cases except 56 cases followed up unsuccessfully. Metastases of the liver were confirmed by autopsy in 7 cases and by surgery in 128 cases. Other 15 cases were inoperable, but their hepatic metastases were obvious from the clinical findings and were included in this study.

### Scanning method:

Fifteen minutes after intravenous injection of  $250+50\mu\text{Ci}$  of  $^{198}\text{Au}$  colloid or  $2+1\text{mCi}$  of  $^{99\text{m}}\text{Tc}$ -colloid the scan was begun, using two kinds of rectilinear scanner (Shimadzu SCC-150, SCC-20).

Frontal view and right lateral view were routinely obtained.