

Computer Processing of Liver Scintigram and Haepatogram, & its Clinical Application on the Biliary Tract Surgery

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On the dynamic study by ^{131}I -BSP, we have no conclusion even now, where on the liver the interesting area should be instituted.

Liver scitigram and haepatogram with ^{131}I -BSP were analysed by the computer to be grouped into the 5 types, which is so called IDS (Iso Dose Scintigram) classification.

	FORM	DISCHARGE
Type I	normal	normal
Type II	normal	delayed
Type III	transformed (SOL)	normal
Type IV	normal	no discharge
Type V	transformed (SOL)	no discharge

Using 16 ϕ jumbo scinticamera, type 202 with adapted 1500 holes parallel collimater, we indicated

on line these image by 4096 channels.

The histogram of the left view of these three dimensional image were divided, from the maximum point to the minimum point, into the 5 dividing points.

The differences between the each types of the IDS classification were indicated clearly if the each slant curves are compared.

We compared this classification of IDS with the clinical data about 30 cases of the biliary tract surgery performed by our team.

The observation and analysis of ^{131}I -BSP & $^{99\text{m}}\text{Tc}$ -Phytate liver scintigram were very useful for the pre-operative & post-operative examinations in the hyper-bilirubinemia and tracing the causes of the post-cholecystectomy syndrome.

Evaluation of the Vascular State of Hepatic Tumor with Radioisotope Angiography and Blood Pool Scintigraphies (Early and Delayed)

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Combined radioisotope examinations of hepatic tumor have been performed using α_1 -fetoprotein radioimmunoassay, radioisotope angiography of the liver and some tumor positive imaging scintigraphies. However, it is frequently impossible with these methods to differentiate metastatic cancers and benign focal lesions.

In the present study, radioisotope angiography

of the liver, and both early (5 min. later)—and delayed (4 hours later) blood pool scintigraphies of the liver were done continuously after 10 mCi of $^{99\text{m}}\text{Tc}$ -albumin intravenous injection, in the case of clearcut focal lesions on $^{99\text{m}}\text{Tc}$ -colloid liver scan. Furthermore, the relationships among these findings were examined.

Four out of seven cases with hepatoma and two