

DIFFERENTIAL DIAGNOSIS OF THE DIFFUSE  
LIVER DISEASE USING THE SPLEEN/LIVER  
COUNT AND DENSITY RADIO.

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We examined the biopsy-proven 110 cases of  
the liver disease using the S/L ratio

In 81 cases out of 110 cases were measured the  
density ratio by densitometer, 29 cases were  
measured count ratio using scintipac 200.

Density S/L ratio are followed.

- 1) Liver cirrhosis 28 cases AP 0.92 PA 1.41
  - 2) Chronic hepatitis active type 16 cases  
AP 0.60 PA 0.80
  - 3) Chronic hepatitis inactive and acute hepatitis  
5 cases AP 0.41 PA 0.50
  - 4) Other disease 32 cases AP 0.39 PA 0.67
- Count S/L ratio are followed

- 1) Liver cirrhosis 8 cases AP 0.78 PA 1.28
- 2) Chronic hepatitis active type 10 cases AP 1.01
- 3) Chronic hepatitis inactive type AP 0.44 PA 0.77
- 4) Liver abscess AP 0.96 PA 1.72
- 5) Others 9 cases AP 0.30 PA 0.50

We re-evaluated that the S/L ratio is the one  
of the usefull parameter in the diagnosis of diffuse  
liver disease.

STUDIES ON THE INTRAHEPATIC DISTRIBUTION OF  
SPLENIC BLOOD FLOW BY SCINTIPHOTOSPLENOPORTOGRAPHY

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In small group examination of scintiphotospleno-  
portography(SSP), we have found that splenic flow  
was not always distributed uniformly to right and  
left lobes in human liver (1). In the present study,  
we have reassessed the intrahepatic distribution of  
splenic flow using SSP in larger group.

The present study was carried out in 46 patients  
with various disorders, including 39 patients with  
chronic hepatitis. The patients were studied in the  
supine position after overnight fast. The scintil-  
lation camera was positioned to be close to the upper  
abdominal area. An injection of less than 2 ml of  
 $^{99m}\text{TcO}_4^-$  or  $^{133}\text{Xe}$  in saline solution (5 to 15 mCi),  
was made into the spleen. The method of SSP has been  
described in detail elsewhere (2). In order to as-  
sess the relative thickness of the liver, 200  $\mu\text{Ci}$  of  
 $^{198}\text{Au}$  colloid or 3 mCi of  $^{99m}\text{Tc}$  phytate was injected  
into an antecubital vein and a liver scintigram was  
obtained.

Various patterns of intrahepatic distribution of  
splenic flow were observed. These patterns were  
classified into 4 groups. Group I; Homogeneous dis-  
tribution of splenic flow was observed. Group II;  
Predominant distribution was observed in the right  
lobe. Group III; Predominant distribution was ob-  
served in the left lobe. Group IV; Heterogeneous  
distribution in the right and/or left lobes was ob-  
served, as if space occupying lesion exists within  
hepatic lobes. In over all attempts, Groups I, II,  
III and IV were observed in 52%, 24%, 6% and 18%  
respectively.

Groups II and III were considered to represent the  
existence of streamline flow, as well as the previ-  
ous report (1). The existence of group IV suggests  
that some factors except streamline flow, such as  
regional vascular constriction, may be concerned in  
the intrahepatic distribution of splenic flow.

References

1. Kashiwagi, T., et al:Gastroenterology 69:1292,1975
2. Kashiwagi, T., et al:Gastroenterology 67:668,1974