

right and left lobes of the livers was also different at the stage of cirrhosis. The isotope-accumula-

tion curves above the spleen were also examined in cirrhotic subjects.

¹³¹I-BSP Loading Studies in Infancy and Childhood

Y. ABE

Department of Pediatrics, Shinshu University, Matsumoto

0.26–0.66 mg (80–200 μ Ci) of ¹³¹I-BSP was given intravenously to 56 infants and children with liver diseases (1 month–12 years)

The following studies was performed simultaneously.

1) The retention ratio at 30 minutes. 2) The disappearance curve from 1 ml of peripheral blood day by day. 3) Liver scintiscanning immediately after injection to 5 hours, and 24 or 48 hours, then the case the liver image could be seen, to 14 days was carried out. 4) In infants, both stool and urine were calculated in counts min by Well type scintillation counter during one week.

The result was follows.

1) In normal infants and children, the time of ¹³¹I-BSP excretion from liver cell was much longer compared with adults and in infants it was not mean abnormal if the gall bladder could not be seen. 2) Both the case the liver image after 24 or 48 hours remained and not were seen, while the retention ratio or the disappearance curve was normal. 3) In conclusion, ¹³¹I-BSP loading studies showed the different liver function in several liver diseases of infants and children including acute or chronic hepatitis infantile hepatitis, congenital biliary atresia and so on.

Binding Capacity Between ¹³¹I-BSP and Serum Protein in Liver Disease by Methode of Single Radial Immunodiffusion

Y. YATSUJI, K. KAMISAKA, Y. SUZUKI, K. MATSUMOTO, H. YAMADA and
H. KAMEDA

Second Department of Internal Medicine, Tokyo University, Tokyo

It is said that SulFOBromophthalein. Indocyaninegreen and other organic anions used as the test of liver function are bound to albumin and α_1 -lipoprotein in blood. Binding Capacity between ¹³¹I-BSP and sera of the patient suffered from acute hepatitis, chronic hepatitis and liver cirrhosis were studied by the method of single radial immuno diffusion using specific Antiseras of 27 kinds.

Method: The antigen plate was made by the method that solution mixed 0.2 ml of serum with 0.1 ml of ¹³¹I-BSP was added 1.5 gr of agarose diluted with phosphate buffer pH 7.4. 30 wells, 2 cm in diameter were made by in-

spiration. Into the wells of these plates specific antisera of 27 kinds were put. After incubation for 48 hours, diameter of precipitated rings were measured, then the plates were washed by saline for 48 hours. After dried the plates autoradiography was carried out on X-Ray film for 4 to 6 hours.

Results: Immunodeffusion test by ¹³¹I-BSP-antisera plate showed that ¹³¹I-BSP was bound markedly to alubmin, pre-alubmin (pre), haptoglobin (Hp), B-lipoprotein (B-Lipo), α_2 -HS glycoprotein (α_2 -HS) and γ -Mglobulin (γ -M), and partly to α_1 -lipoprotein, α_1 -acid glycoprotein (α_1 -AG), α_2 -Macroglobuline (α_2 -M) and transferrin.