

quate in the mild cases. However, it has been made possible to diagnose even mild liver disease when 5.0 mg/kg of BSP was loaded before ^{131}I -BSP was administered. Moreover,

it is considered exceedingly that depressing mechanism of these value obtained when BSP is loaded is due to competitive phenomenon of the both substances.

^{131}I BSP Scans for Differential Diagnosis of Jaundice

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In order to investigate the mechanism of jaundice in constitutional hyperbilirubinemia, sequential liver-abdominal scans were performed using ^{131}I BSP and ^{131}I Rose Bengal in 3 cases of Dubin-Johnson's syndrome, each case of Rotor's syndrome and Gilbert disease.

In Dubin-Johnson's syndrome, both ^{131}I BSP and ^{131}I RB were rapidly taken up by the liver. Excretion of ^{131}I BSP into intestine was markedly delayed and the dye seemed confined in the liver. On the other hand, considerable excretion of ^{131}I RB was observed 4 hours after injection.

In Rotor's syndrome delayed blood clearance of both dyes was the most characteristic feature. However the dye once taken up by the liver was rather rapidly excreted into the intestine. There is no difference between

the biliary function using ^{131}I BSP and ^{131}I RB.

In Gilbert's disease sequential scans with ^{131}I BSP and ^{131}I RB showed normal biliary kinetics.

Disturbance of canalicular excretion is the conspicuous feature in Dubin-Johnson's syndrome, while sinusoidal uptake was mainly impeded in Rotor's syndrome. Difference of excretory phase between ^{131}I BSP and ^{131}I RB suggested the probable presence of different excretory mechanism of both dyes. There is much similarity as a test substance for the liver function among dyes including Bilirubin, BSP, ^{131}I BSP, ^{131}I RB etc. However differences among them must be carefully studied in order to know the mechanism of biliary excretion.