

I recently had the opportunity to study a patient with documented Gilbert's disease before, during, and after 48 hr of caloric restriction (less than 400 calories/day) using the  $^{181}\text{I}$ -rose bengal clearance test described by Nordyke and Bland (3). Although the patient's indirect bilirubin more than doubled (2.2 mg%–4.8 mg%) after 48 hr of fasting, the  $^{181}\text{I}$ -rose bengal clearance (expressed as 20 min/5 min head count%) only rose from 41% to 45%, remaining well within the normal range. Two days after resuming a normal diet, the patient's bilirubin returned to the pre-fasting level and the  $^{181}\text{I}$ -rose bengal clearance returned to 41%.

Thus it appears that even after the additional stress of caloric restriction, the  $^{181}\text{I}$ -rose bengal clearance test remains normal in Gilbert's disease in spite of significant rise in indirect bilirubinemia. This further supports Iio's findings that patients with Gil-

bert's disease have no defect in hepatocyte uptake of  $^{181}\text{I}$  tagged dyes such as BSP and rose bengal.

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#### VARIATIONS OF NORMAL KIDNEY POSITIONS ON RENAL SCANS

Most of the textbooks of nuclear medicine describe only the normal or abnormal appearance of a renal scan but do not comment on relative position of the kidneys. This subject was the cause for a recent discussion and review of cases in our Section of Nuclear Medicine. We found that of 37 scans evaluated, the right kidney was higher than the left kidney in 47% of the cases. In an additional 22%, the right kidney was at the same level as the left.

Twenty one of the 37 patients had both a renal scan (prone) and an IVP (supine). In 62% the right kidney shifted superiorly when the patient was studied in the prone rather than the supine position.

Riggs et al (1) have demonstrated that the relationship of the right kidney to the left kidney changes when the patient is moved from the supine to prone position. This is consistent with the right kidney moving cephalad and medially while the left kidney moves caudad.

Larose and Izenstark (2) also have studied kidney position in the supine and prone positions. Because of the increasing number of renal biopsies and consequent need for localizing the kidneys, they investigated kidney location with both prone and supine IVP films. In the supine position, the right kidney was higher than the left in 20% of the cases; in the prone position, the right kidney was higher in 34%.

When the question arose in our laboratory, several major nuclear medicine textbooks were consulted (3–8) and only one (8) mentioned that the right

kidney is frequently higher than the left on scans. Interestingly enough, this one text carries the earliest copyright date, so we are concerned that this observation has been lost in the wealth of information which has developed during the intervening years. Our letter writing objective is to bring these facts to the attention of our colleagues and to stress the need for including this information in nuclear medicine texts.

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