Case Reports

Renal and Liver Scans Showing Polycystic Disease

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Polycystic kidney disease is characterized by virtually complete obliteration of the renal parenchyma by cysts. This rare disease appears in approximately 1 in 400 to 500 autopsies. In many of these patients, polycystic liver disease, polycystic pancreatic disease, hemangiomas of the pancreas and brain, and congenital berry aneurysms of the circle of Willis may also occur (*1*).

A renal scan using 5 mCi of Tc-99m glucoheptonate and a liver scan using 4 mCi of Tc-99m sulfur colloid were performed in our department on a 69-year-old woman with known polycystic disease. The patient presented with gross hematuria. She had a urine infection with a creatinine of 3.9 mg/dl. On the renal scan, 500,000 counts per view were obtained and 1,000,000 counts per view were obtained on the liver scan.

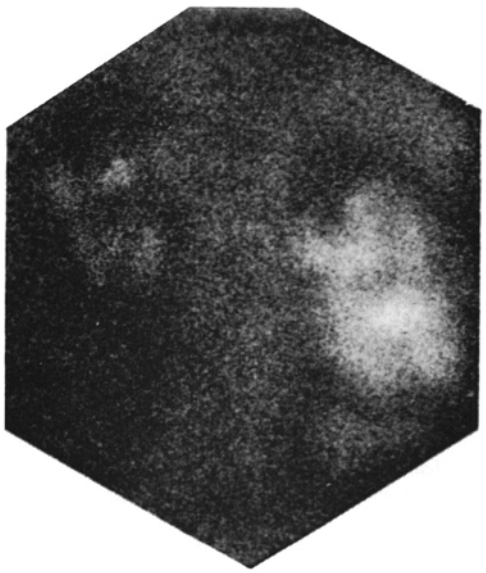

FIG. 1. Posterior view of kidney image shows abnormal accumulation of Tc-99m glucoheptonate.

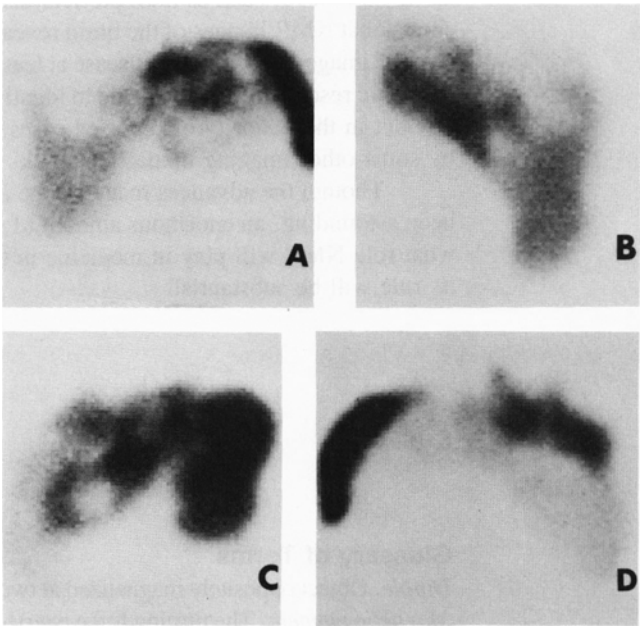

FIG. 2. Liver scan shows areas of decreased uptake: (A) Anterior, (B) Right lateral, (C) Left lateral, and (D) Posterior.

The renal scan (Fig. 1) showed only minimal accumulation of radiopharmaceutical in the left kidney and an enlarged right kidney with many well-defined areas of decreased accumulation of the radiopharmaceutical throughout. This is characteristic of multiple cysts.

The liver scan (Fig. 2) showed a slightly enlarged liver with many well-defined areas of decreased accumulation of the radiopharmaceutical throughout the liver.

The studies confirmed the original diagnosis of polycystic disease.

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Reference

1. Robbins S, The kidney. In: *Pathology*, Philadelphia: WB Saunders 1967;984-1047.