

Winter's "segment c".

The normal value for " $T_{1/2}$ " was 4.98 ± 1.76 min. and that for " $t_{1/2}$ " was 1.32 ± 0.53 min. Very high reproducibility was observed in this method. Moreover the original renogram curve can be almost completely simulated with these three parameters (i.e. " $T_{1/2}$ ", " $t_{1/2}$ " and " T_o ").

Intravenous injection of Furosemide influenced on renogram curve immediately. Administration of Furosemide a few minutes before the radio-hippuran injection, resulted in

obvious shortening of " Bt " and " $t_{1/2}$ ". When we administered this substance 20 minutes after radio-hippuran injection, an obvious improvement was resulted in some cases with abnormal record probably due to over-dehydration. It seems this improvement depends to So that such application of Furosemide to renogram is very useful to distinguish some false positive patterns from true abnormalities.

Evaluation of Renal Scanning, Radioisotope Renography and Renal Angiography on Renal Tuberculosis

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Radioisotope renography, renal scanning, and renal angiography were performed on a total of 47 cases of renal tuberculosis: unilateral renal tuberculous, 34 cases, bilateral, 5 cases; and that of solitary kidney 8 cases.

The diagnostic efficacy of these three methods were compared and following results were obtained.

1. The diagnostic rates of tuberculosis obtained by these three methods were: radioisotope renography, 92%; renal scanning, 96%; and renal angiography 88%.

2. The affected kidneys were divided into 4 groups: Group 1 of the kidney with normal pyelographic appearance, Group 2 of the kidneys with localized tises, Group 3 of desolute kidney and Group 4 of the kidney with stenosis of the upper urinary tract.

Radioisotope renography was found effective in diagnosis of renal tuberculosis of Group 4, and renal scanning and renal angiography were effective in that of Group 2, all these methods were found effective.

Clinical Application of Renoscintigram

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There have been various papers reperting the value of the renoscintigram by ^{203}Hg , ^{197}Hg -Neohydrin and MAA. The purpose of this paper is to report its fundamental analysis and its application to a case of pyelonephritis.

Method:

1) Renal macroautogram of the rabbit was made using ^{203}Hg -Neohydrin and MAA.

2) MAA was injected to the pyelonephritic kidney selectively at the time of selective renal angiography. Renoscintigram of ^{203}Hg -Neohy-