The Automatic Diagnosis of Renogram by Minicomputer System (Third Report)

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According to the method which we had already reported at the meeting of Nippon Societas Radiologica and the Japanese Society of Nuclear Medicine in 1972, we observed the change of R.O.I. renogram curves and their same transformation curves in the various conditions of the same patient. (i.e. hydration, dehydration and injection of Lasix 20 mg intravenously)

The transformations we used, were considered to be able to obtain the curves that would be after the injection or R.I. into the area, i.e. Region in Interest (R.O.I) in this report were cortex areas and pelvis areas.

The results were as follows:

These three conditions in two cases (case 1: man, 23 years, 1-hydronephrosis, case 2: woman, 45 years, 1-renal calculus and tumor of r-kidney) were studied. The obvious change of the renogram was looked in B-segment and C-segment. And in those three conditions, maximum shortening of T\textsubscript{max} and T/2 was observed after the injection of Lasix 20 mg intravenously.

In those cases after analysing the curves, we observed that cortex area curves were slightly changed and pelvis area curves were more changeable than cortex area curves.

And as far those transformed curves, the obvious changes were chiefly observed at pelvis area curves.

Renal Scanning with Tc-99m Penicillamine Acetazolamide Complex (TPAC)

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Tc-99m labeled penicillamine acetazolamide complex (TPAC), introduced by S. Halpern as a new renal scanning agent in 1972, is superior in scan image and in radiation dose to the other Tc-99m compounds or mercurial radiopharmaceuticals. A characteristic advantage of TPAC is that even in the case with severely impaired renal function, the kidney image is fairly well...