

The Automatic Diagnosis of Renogram by Minicomputer System

K. NAITO

Department of Internal Medicine, The Second Division, Osaka Medical College.

K. YAMAZAKI, H. KURISHIMA, Y. TEZUKA, K. KANNA, K. FUZIOKA,
Y. OGAWA, T. NAKAOKI, A. TANAKA, H. AKAGI

Department of Radiology, Osaka Medical College, Takatuki-shi.

1) The method to store the data of renogram into the computer system which was connected on line with usual renogram counters, and to display them on the CRT was studied.

Those curves were same as usual renogram curves, and it was shown that this system was useful in ordinary examination.

2) The method to store the data obtained from scinticamera by simultaneous administration of two nuclides (ex. ^{99m}Tc -DTPA and ^{131}I -Hippuran or ^{197}Hg -Neohydrin and ^{131}I -Hippuran paired) into the computer system was examined.

Those data were recorded on to the magnetic

tape and were displayed on the CRT.

R.O.I. (region of interest) renogram, where were on cortex area and pelvis area, had investigated in those series and we can indicate the following results:

^{99m}Tc -DTPA are taken in Kidneys more quickly but excreted more slowly than ^{131}I -Hippuran and ^{197}Hg -Neohydrin were taken in more slowly than ^{131}I -Hippuran and there is little excretion of ^{197}Hg -Neohydrin for one hour.

The other hand ^{131}I -Hippuran have been excreted almost completely at than time.

RI Data Processing System for Nuclear Medicine (Report 13) A Stochastic Model of Regional Renograms

K. KIMURA, T. NISHIMURA

Radiology and Nuclear Medicine, Medical School Osaka University

T. FURUKAWA, A. KITABATAKE, S. TAKASUGI, M. HORI, H. TAKEDA and H. ABE
1st Department of Internal Medicine, Medical School Osaka University

F. KAJIYA and H. INADA

Faculty of Engineering, Osaka University

In order to interpret objectively the intrarenal ^{131}I -hippuran dynamics, a mathematical

model was made with respect to 'regional renograms' obtained from the series of scinti-