

only helpful to the diagnosis of the bladder tumor, prostatic and intra-scrotal diseases, but also valu-

able to the evaluation of the tumor treatment.

Dynamic Studies of Placental Blood Flow (PBF)

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A method for the continuous recording of utero-placental blood volume has been described on 91 pregnant women by the use of ^{99m}Tc -albumin.

Immediately after intravenous infusion of ^{99m}Tc -albumin (1 mCi), the gamma-camera was connected with the 32K computer to demonstrate the ROI on the placental and femoral artery as curves.

The fetal radiation dose was as small as about 10 mrad, and may be considered virtually free of any embryologic risks.

The patterns of placental blood flow (PBF) on

the placenta were studied.

These changes were observed most frequently in complicated prematurity, such as toxemia, intrauterine fetal death, placental insufficiency or diabetes mellitus.

The alterations in wave pattern which appeared attributable to spasm or ischemia of arterioles, was agreed with pathologic diagnoses of the placenta.

The relationship of the placental blood flow and clinical data, especially urinary estrogens or renal function, have been discussed.

Clinical Evaluation of Renoscintiphoto in Pediatrics

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Renoscintiscameras were performed on 147 children, aged two to fifteen years, during this last 5 years in Kitasato University Hospital.

In pediatrics, among many cases of renoscintiphoto, they have contributed to the clinical diagnosis of the urinary tract.

Particularly in the newborn infants the reno-

scintiphotos have been considered to be more useful and safer than intravenous urograms and the other X-ray examinations.

In addition, we reviewed two instances of urinary tract disorders; infantile polycystic kidney and congenital hydronephrosis.

Tomoscintigraphy by PHO/CON, Computed Tomography and Echography of the Kidney: A Comparative Study

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Tomoscintigraphy by the PHO/CON TM Multi-Plane Imager System (PHO/CON), computed

tomography (CT) and echography (ECHO) were compared with regard to detection of renal lesions.