Renograpy in the Gynecology

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The disturbance of urinary tract which was caused by gynecological disorders often result in secondary renal failure, and it has been called as obstructive uropathy. It is believed to be necessary that the diagnosis of the obstructive uropathy is established by direct renal function tests. Then the renography is valuable test for this reason and the diagnostic appraisal of renography in the field of gynecology was evaluated from the stand point of its pathogenesis.

The renogram of the normal kidney can be characteristically described in terms of three segments (a, b and c segment). The renogram in cases of unilateral obstructive uropathy is recognized with relative ease as abnormal, when bilateral renograms are superimposed and the third segment is shown to be linear or rise pattern.

In our department, the renogram pattern has been divided into 4 types (N: normal pattern, M: prolongation of the transit time and deppression of b, M: the platou and ascendence pattern). Obstructive uropathy in gynecology usually affects the renogram. IN general, such obstructive uropathy undergoes series of the renogram pattern changes from N to M and from M to L, depending on the severity of obstruction and the amount of renal dysfunction.

The longer the obstruction lasts, the more likely certain changes appear on the first two segments. Chronic back pressure causers glomerular and tubular dysfunction, and results deppressed renogram. Once the L-pattern appears on the renogram, recovery of the renal function rarely excepted even if the obstructive is corrected. If treatment is instituted for the obstraction at stage of M pattern, the renal function may return to normal.

The renographies were performed on 123 patients with carcinomas of the uteri (stage III) before and after irradiation treatments. Twenty of the 123 cases revealed renal dysfunction prior to the irradiation. Following the irradiation, improvements of the renal function were observed on 12 patients. On the other hand, all patients who did not respond to the irradiation were known to have poor prognosis.

The change of the renogram in course of radiation therapy closely related to the prognosis of cancer of the uterus but it is not possible to differentiate by the renogram post operative stricture from stenosis due to the cancer infiltration.

However, as the dynamic function study of the kidney, the renogram is valuable test in gynecological uropathy as well as in urological disease.

Symposium: The diagnostic Use of Radioisotopes in Obstetrics & Gynecology Renography

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Radioisotope renography is uniquely useful as a research tool to study urinary tract dysfunction associated with irradiation and pelvic radical procedure.

It was performed by the intravenous injection of a tracer dose of ^{131}I-labeled sodium O-iodohippurate with external monitoring over each kidney. Photoscanning of bladder was