

L. Endocrinology

¹³¹I-19-Iodocholesterol Adrenal Scanning in Primary Aldosteronism

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Adrenal scanning was done in 23 patients, 6 of primary aldosteronism, one of so-called idiopathic aldosteronism, 12 of essential hypertension and others. A tracer dose of 1 mCi of ¹³¹I-19-iodocholesterol was injected intravenously and as a rule, scanning was done at 8 days after the administration. In addition, each adrenal region is isolated as a region of interest by recording the image of the adrenal regions on the oscilloscope of scinticamera, and right-to-left adrenal uptake ratio of ¹³¹I-19-iodocholesterol was determined.

The result were as follows,

1) Innormal adrenals, right-to-left uptake ratio ranged from 1.05 to 1.60 and averaged in 1.37 ± 0.18 while in primary aldosteronism it ranged from 2.11 to 6.32 and was signifi-

cantly higher than that of normal adrenals.

2) Adrenal scan accurately localized the tumor in all 6 patients with primary aldosteronism. On the contrary, selective adrenal venography showed the tumor in 3 of the 6 patients. In one patient with a $0.9 \times 1.2 \times 1.2$ cm cortical adenoma demonstrated by adrenal scan, venography did not disclose the lesion.

3) There was no correlation between right-to-left uptake ratio and the size of adenoma in primary aldosteronism.

The reliability, the greater safety and simplicity of adrenal scanning suggests that it should be used as a screening test before venography when primary aldosteronism is strongly suggested by endocrinological examinations.

Diagnostic Value of Adrenal Scintigraphy Using ¹³¹I-CHOLESTEROL

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Diagnostic value of adrenal scintigraphy using ¹³¹I-cholesterol was estimated on histologically proven cases. And the radionuclide

accumulation in adrenal glands of patients with hypertension due to various causes was quantitatively measured by analysis of digital