CAPTOPRIL RENOGRAPHY IN THE DIAGNOSIS OF RENOVASCULAR HYPERTENSION

THESIS

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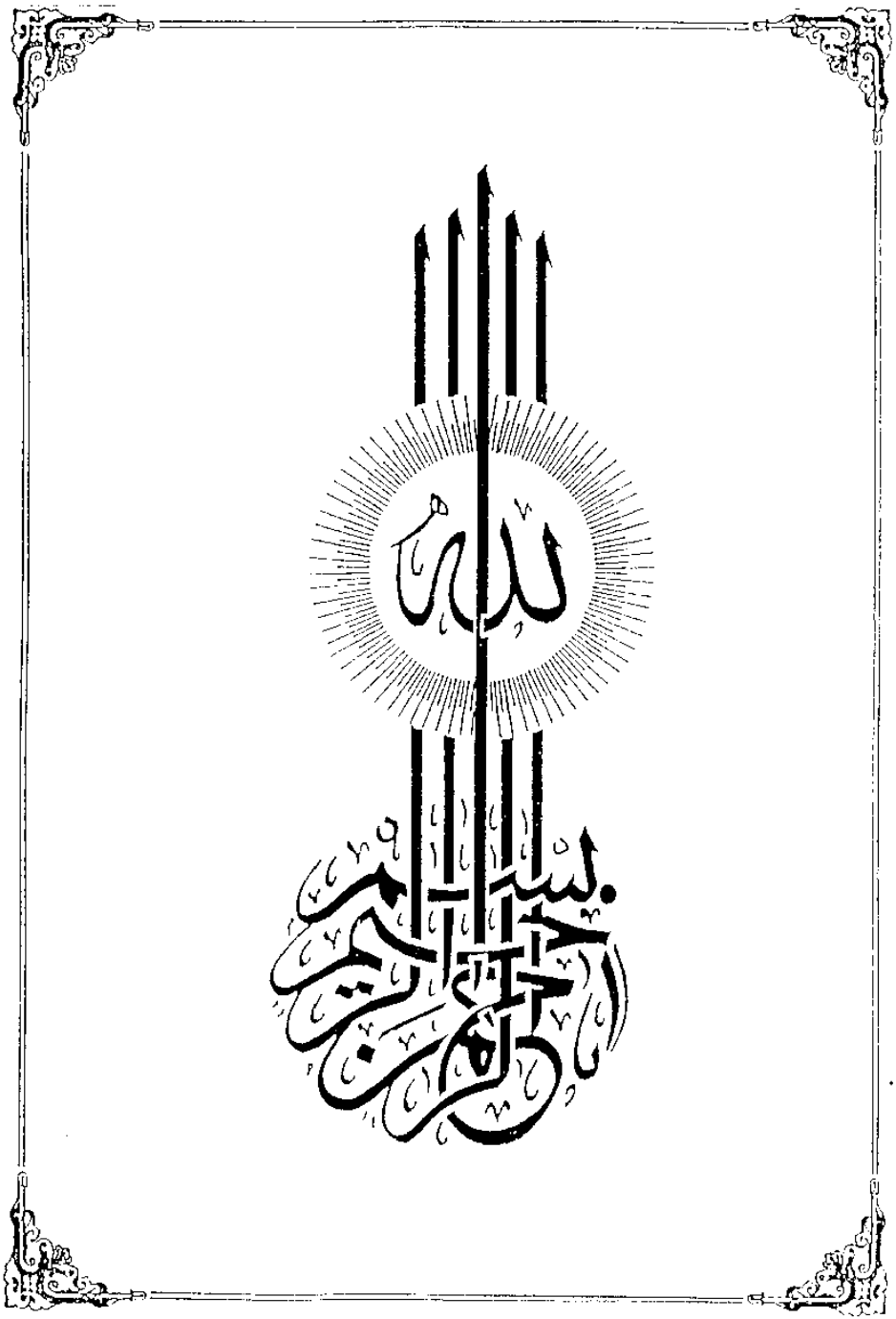

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Abstract

The study was conducted on 50 cases, 39 males and 11 females, their ages ranged from 17 to 65 years. These cases were referred mainly to the nuclear medicine unit of Radio-diagnosis department, Ain Shams University Hospitals.

All these patients (including 3 patients with renal transplantation) were suffering from moderate to severe hypertension and were referred by their physicians to do renal scan in order to confirm or exclude Reno-vascular disease as a cause of hypertension.

All these 50 cases were examined by captopril renal scintigraphy. Angiography was done for 28 cases. Blood urea nitrogen and serum creatinine were estimated for 30 cases. renal duplex was done for 18 cases. Reno-vascular hypertension accounts for less than 15% of hypertension and varies from 0.5% in unselected hypertensives to 45% in highly selected population. Its diagnosis is very important because of its potential curability by surgery or angioplasty and its correction prevents a further progression of an ischaemic renal insufficiency.

In many cases the renal artery stenosis is incidental and is not the cause of hypertension and patients do not benefit from surgery or balloon dilatation.

In our study, we used captopril renography to detect functional renal artery stenosis and we found that when renography is clearly positive, the likelihood of finding haemodynamically significant renal artery stenosis is very high while when a post captopril renography is clearly negative, haemodynamically renal artery stenosis is extremely unlikely and renal angiography can be avoided In patients with borderline results in which a high index of clinical suspicion exists, performance of angiography would be indicated.

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