



## Multiple renal arteries as a possible cause of secondary arterial hypertension

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**Introduction:** Subjects with multiple renal arteries have been shown to suffer more frequently from hypertension<sup>1,2</sup>. The aim of the study was to determine the prevalence of multiple renal arteries in patients in whom other causes of secondary hypertension have been excluded.

**Patients and Methods:** Out of 361 patients with hypertension screened through our outpatient department, we studied 13 patients that were subsequently hospitalized during the last 12 months. All of them had blood samples taken for exclusion of endocrine disorders and all had undergone abdominal CT angiography in order to exclude renal parenchymal disease or renal artery stenosis (**Figure 1**).

**Results:** 8 od 13 (62%) patients with no other secondary cause of hypertension have had multiple renal arteries (Chi-Square „Goodness of Fit“ Test,  $p=0.036$ ). Mean age was 36.2 years and all patients were male. Four patients had double right renal artery and four patients had double left renal artery. The median value of antihypertensive drugs taken was 2.5.

**Conclusions:** The prevalence of MRA was greater in our study group than in the general population. We conclude that patients with multiple renal arteries and no other secondary causes of hypertension constitute a group who may be prone to develop arterial hypertension.

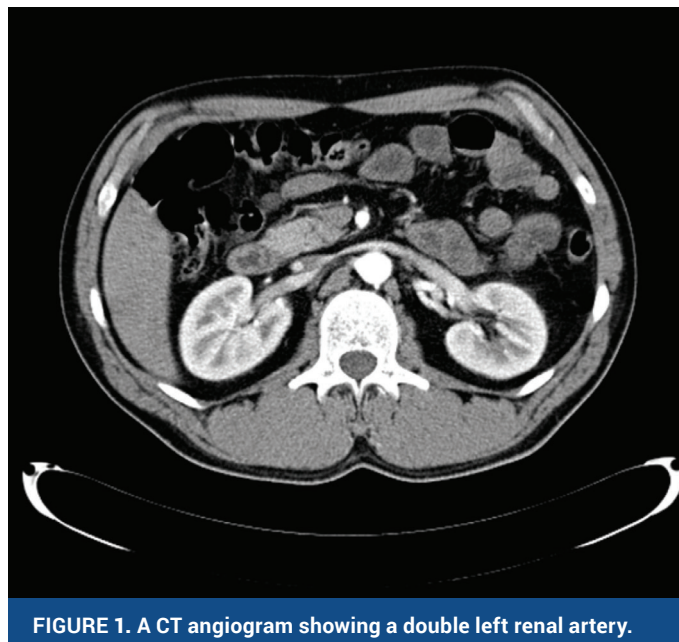


FIGURE 1. A CT angiogram showing a double left renal artery.

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### LITERATURE

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