EDITORIAL

Renal denervation and treatment-resistant hypertension: A matter of importance for interventional radiology

Arterial hypertension is a very common condition affecting up to one in three people and resulting in more than 7 million deaths each year in the world. Despite very considerable progress in medical treatment, BP objectives (<140/90 mmHg as a clinical measurement and <130/80 mmHg in diabetes or renal impairment) are not reached in a significant number of hypertensive patients (in France, the national health/nutrition survey revealed that 50% of patients of hypertension treated were not controlled). The prevalence of hypertension resistant to tritherapy including a diuretic is not so high, at approximately 8 to 12% in the general population of hypertensive patients.

Drug treatments are still not capable of totally controlling hypertension, and new instrumental methods have appeared recently for managing resistant cases. At present, one of the most promising is intra-arterial denervation of the renal artery, which consists of ablating the sympathetic fibres of the adventitia of the renal artery. We do indeed know that the sympathetic nervous system that innervates the kidney via efferent (CNS to kidney) and afferent (kidney to CNS) fibres plays an important role in the long-term homeostasis of arterial pressure. This technique can be performed in about half an hour under sedation/analgesia and has produced encouraging results, which still need to be confirmed however, on a larger scale.

The open, randomised study published in the Lancet evaluated the efficacy and safety of renal denervation for reducing blood pressure (n = 52) compared with absence of the procedure in a control group (n = 51) in 103 patients with tritherapy resistant hypertension [1]. Clinical blood pressure was reduced by a mean of 32/12 mmHg in the 49 patients treated by denervation who were evaluated after 6 months, whereas it had not changed in the 51 patients of the control group evaluated at 6 months (0/1 mmHg). Even if there may have been bias in the methodology due to the study’s open character and to measurement of the primary evaluation criterion (measurement of clinical blood pressure), the method should nonetheless be included in the therapeutic arsenal for management of resistant hypertension.
You will find in this issue the multidisciplinary consensus document (SFR-SFC) which describes the indications, patient selection criteria, outlines of the training and conditions for performing this new procedure, while awaiting the results of the French DENER-HTN trial aided by the French Ministry of Health under a measure to support innovative and costly techniques (STIC), which will begin in May 2012.

At present, nobody really knows what position this technique will hold relative to drug treatment, but it is certain that the number of patients who should be treated justifies the active involvement of interventional radiologists.

Reference


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