

Three-year South- African Data for Renal Denervation- Dr Iftikhar Osman Ebrahim-Unitas Hospital, Centurion South-Africa

Dr Iftikhar Osman Ebrahim

Unitas Hospital, Centurion South Africa, Email: drioebrahim@gmail.com

Resistant hypertension affects 13% of the entire hypertensive population and is defined as a blood pressure which remains elevated despite being on treatment with a full dose of more than 3 anti-hypertensive agents of different classes including a diuretic. Catheter based renal denervation with radiofrequency energy ablation is a promising treatment option for patients suffering from resistant hypertension. This therapy reduces sympathetic renal tonus and arterial blood pressure. The aim of this study was to report the 3-year outcome of patients treated with renal denervation. A total number of 11 patients were treated with renal denervation after having coronary and renal angiography. Pre - and post blood pressure measurements was recorded up to 3 years post procedure. The femoral artery was accessed with the standard percutaneous technique. Renal angiogram was performed. The simplicity catheter was advanced into the renal artery and connected to the radio frequency generator. Four to six ablations were performed in each renal artery. Femoral closure devices were used where appropriate. The patients were monitored over-night and their renal functions were measured the next day.

A significant decrease in systolic blood pressure from baseline to 180 days was seen with a mean decrease of 18 mmHg (P=0.016). There were 6 patients who experienced more than 10 mmHg decrease in systolic blood pressure from baseline up to 180 days. Also, 33% of patients reduced medication in at least one agent. There were 3 patients who experienced more than 20 mmHg decrease in systolic blood pressure from baseline up to 3 years post procedure, and an additional 2 patients with a 10mmHg decrease after the 3rd year.

Catheter based renal denervation proves to be a successful procedure in lowering blood pressure, that may decrease major hypertension complications in patients with resistant hypertension.