Abstract

Treatment resistant hypertension is defined as a blood pressure not achieving goal blood pressure (<140/90 mmHg) with a combination of three or more antihypertensive drugs. There are several causes for patients not responding to antihypertensive medication. One of the major reasons is non-compliance to the treatment often due to real or perceived side effects or due to a great number of medications and frequent dosing. Exogenous substances, most frequently, non-steroidal anti-inflammatory drugs, and, often not recognized, over-the-counter medications containing ephedrine or pseudo-ephedrine, can reduce the effect of antihypertensive drugs. Obesity and obstructive sleep apnea oppose antihypertensive drug effects by several mechanisms but predominantly by an increase in the activity of the sympathetic and renin-angiotensin-aldosterone systems. White coat hypertension as a cause of treatment resistance is suspected if there is no target organ damage or if the patients complain of symptoms of hypotension during antihypertensive treatment. Secondary forms of hypertension, although comprising only about 5% of patients with treatment resistant hypertension, are important to identify as they may represent a curable form of hypertension.

Keywords

antihypertensive treatment, treatment resistance, refractory hypertension, secondary hypertension.