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New guidelines for treating resistant hypertension

BIRMINGHAM, Ala. -- Resistant hypertension, blood pressure that remains above goal despite taking three antihypertensive medications or high blood pressure that is controlled but requires four or more medications to do so, may benefit from specialized diagnostic and therapeutic treatment by health care providers according to guidelines issued by the American Heart Association and co-authored by UAB physicians.

Lead author David A. Calhoun, M.D., professor of medicine in the UAB Division of Cardiovascular Disease, and colleagues said successfully treating resistant hypertension requires patients to modify lifestyle factors that contribute to treatment resistance, including using less salt, losing weight and drinking less alcohol. It also requires physicians to better diagnose and treat secondary causes of high blood pressure and more effectively use multiple-drug treatments. This is the first consensus statement to define resistant hypertension and recommend an approach for evaluation and treatment.

Calhoun said while it is not known how many people in the U.S. with high blood pressure have resistant hypertension clinical trials suggest it may as high as 20 to 30 percent.

"Older age and obesity are two of the strongest risk factors associated with resistant hypertension and unfortunately, with an aging and increasing heavy population, we can anticipate resistant hypertension becoming more and more common," he said. "And people need to recognize the importance of blood pressure control. Persons with resistant hypertension are at increased risk for cardiovascular diseases, including heart attacks and strokes."

Calhoun and colleagues emphasize in the statement that effective use of diuretics is essential for treatment of resistant hypertension. Calhoun said they recommend that a long-acting diuretic be part of the treatment regimen of all patients with resistant hypertension in order reduce fluid retention and thereby blood pressure. He added that some patients may also benefit from adding mineralocorticoid receptor antagonists (MRAs) to their treatment regimens.

MRAs have traditionally been used to treat a condition called primary aldosteronism, which is found in about 20 percent of patients with resistant hypertension. However, recent clinical studies indicate that MRAs may be useful in treating resistant hypertension even in the absence of demonstrable aldosterone excess.

"The benefit of MRAs for treating resistant hypertension has been recently appreciated," he said. "Hypertension specialists are using them more commonly, but they are probably not being routinely used by other physicians. Prescription of MRAs does require biochemical monitoring, particularly measurement of serum potassium levels, which does limit there use."

Calhoun said it is important to note that uncontrolled high blood pressure and resistant hypertension are not the same and effectively evaluating a patient to distinguish between the two possibilities is key to successful treatment.

"High blood pressure readings can be caused by poor medication adherence, which is not the same as resistant hypertension," he said. "Confirming treatment resistance is the first step in evaluating difficult-to-treat high blood pressure. It also is important to evaluate the condition correctly because often, patients with resistant hypertension have other medical conditions that complicate their blood pressure management. If a secondary cause of hypertension is identified such as obstructive sleep apnea, renal parenchymal disease, primary aldosteronism or renal artery stenosis, treating these disorders, which may require referral to a specialist, can improve blood pressure control."

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