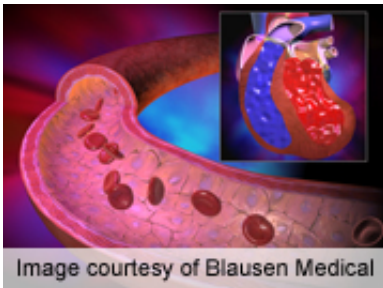


Anti-HTN drugs have distinct effect on central, brachial SBP

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A reduction in central to brachial amplification induced by some antihypertensive drugs may result in lesser reductions in central than brachial systolic blood pressure, according to research published online May 25 in the *British Journal of Clinical Pharmacology*.

(HealthDay) -- A reduction in central to brachial amplification induced by some antihypertensive drugs may result in lesser reductions in central than brachial systolic blood pressure, according to research published online May 25 in the *British Journal of Clinical Pharmacology*.

Charlotte H. Manisty, M.D., and Alun D. Hughes, M.D., of the Imperial College London, conducted a systematic review and meta-analysis of 24 randomized, controlled trials to compare the effects of different classes of antihypertensive medications on brachial and central [systolic blood pressure](#) (bSBP and cSBP) and augmentation index.

In studies comparing an antihypertensive drug with placebo, the

researchers found that antihypertensive therapy reduced bSBP to a greater extent than cSBP, with no between-drug class differences. In trials comparing two different antihypertensive medications, thiazide diuretics, beta-blockers and beta-blocker-containing combinations, and omapatrilat treatment resulted in decreased central to brachial amplification, but other monotherapies lowered cSBP and bSBP to a similar extent. Augmentation index was increased with beta-blocker treatment and reduced by other antihypertensive agents.

"Beta-blockers, diuretics, and combinations containing beta-blockers tend to reduce central to brachial amplification, which implies that achievement of target bSBP may be associated with lesser reductions in cSBP with these classes of agent," the authors write. "This could contribute to differences in outcomes in randomized clinical trials comparing beta-blocker- and/or diuretic-based antihypertensive therapy with other regimens."

More information: [Abstract](#)
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