The emerging case for (much) lower than conventional (<140/90 mm Hg) blood pressure targets in hypertension treatment

Pharmacological hypertension treatment has traditionally been initiated when blood pressure (BP) is consistently 140/90 mm Hg or higher. The on-treatment target BP has been <140/90 mm H or <130/80 mm Hg in persons with diabetes and/or chronic kidney disease (CKD). It has long been known that CVD risk doubles every 20/10 mm Hg higher BP above 115/75 mm Hg. Recent epidemiological data have clearly demonstrated that pharmacological treatment of hypertension even down to SBP<120 mm Hg does not restore CVD risk to the level of persons with naturally occurring SBP below this threshold and pressure-related vascular injury is cumulative. Pharmacological treatment of BP lowers cardiovascular risk with pre-treatment BP levels as low as 110 mm Hg systolic. The recent SPRINT trial of pharmacological BP lowering in hypertensives 50–80 years old with SBP 130–180 mm Hg treated to SBP <120 versus <140 mm Hg has been a game changer because of clear benefit of the lower BP target on cardiovascular events and mortality. Most individuals with hypertension will require multiple drugs to lower BP in a sustained manner to conventional target levels (<140/90 mm Hg). Though individuals selected co-morbidities (eg, beta blockers post-MI, aldosterone antagonists in heart failure) benefit from specific drug therapies, most of the CVD risk reduction is much more closely linked to the magnitude of the BP reduction than to the specific drug(s) used for BP lowering. The approach to optimal diagnostic and therapeutic decision-making will be discussed. Accurate BP measurement is fundamental to optimal patient assessment and clinical decision-making. Key therapeutic considerations will be outlined including how to initiate antihypertensive drug therapy, a rational approach to up-titration of medication, the use of diuretics, and selecting optimal antihypertensive drug regimens (and avoiding ineffective combinations) in ambulatory settings.

Biography

John M. Flack, MD, MPH has been named professor and chair of the Department of Internal Medicine at Southern Illinois University School of Medicine in Springfield. He also is a member of SIU HealthCare, the medical school’s group practice. Dr. Flack is a renowned hypertension specialist. Flack is board certified in internal medicine and is an ASH-certified clinical hypertension specialist. He completed an NIH post-doctoral fellowship in cardiovascular epidemiology from the University of Minnesota (1990). He completed an internal medicine residency and received his medical degree from the University of Oklahoma Health Sciences Center (1985, 1982) where he also served as Chief Medical Resident in 1985-86. He received a bachelor’s degree in chemistry from Langston University (1978). Among his many honors, Flack has been named a “Top Doctor” from the Who's Who Global Directory, was named one of Detroit’s “Super Doctors” and was Academic Physician of the Year from Oklahoma University School of Medicine.

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