

Dear Clinicians,

During some of our discussions, I have come to realize that Clonidine is often used in patients with difficult to treat hypertension. I hope to convince you that Clonidine should be considered as one of the last-resort antihypertensive drugs. A thorough investigation for a secondary cause of hypertension should be conducted if clonidine is needed for hypertension control. First, allow me a quick pharmacologic review. Clonidine is a centrally acting  $\alpha$ -2 agonist, and so is the less commonly used Guanfacine. If you need to use a centrally acting  $\alpha$ -2 agonist, consider Guanfacine as the preferred member of this class of drugs. The landmark SPRINT clinical trial placed Guanfacine on its preferred formulary. Clonidine was listed in a restricted formulary to be used on a case-by-case basis. Furthermore, the Clonidine tablet was not the formulation listed; rather, it was the transdermal formulation (patch) of Clonidine that was listed. The oral formulation of Clonidine is associated with dangerous blood pressure swings throughout the day. The Clonidine patch acts by systemically releasing the agent through the skin in a more steady manner and can be replaced weekly. While these centrally acting drugs reduce blood pressure levels, the only time that a centrally acting drug has shown any mortality benefit was way back in the 1960's when the VA Cooperative study used reserpine in combination with a diuretic and hydralazine. I think that we have advanced significantly over the past 50 years and have much better drugs! Centrally acting  $\alpha$ -2 agonists are now more commonly indicated in pediatric ADHD treatment and treatment of withdrawal from opiates. Bottom-line, centrally acting  $\alpha$ -2 agonists should be considered for hypertension control only as a last resort. If it has to be considered, Guanfacine would usually be preferred over Clonidine. Guanfacine requires only once a day dosing as opposed to the twice/thrice daily dosing of oral Clonidine. This is why, with Guanfacine, you can avoid the harmful swings in blood pressure levels that often occur with Clonidine use.

If you have specific questions related to hypertension management in your patients, Dr. Williams can be reached directly by email at [Stephen.Williams@nyumc.org](mailto:Stephen.Williams@nyumc.org) or by phone at 646-320-8075 (cell).

THE BP VISIT PROJECT TEAM

<http://www.cdnetwork.org/bp-visit>

