Dear Clinicians,

We are good at treating hypertension, but we often forget to focus on maximizing quality of life (QOL) of our patients. With the recent Valentine's Day celebration, I have decided to address management of one of the more common side-effects associated with antihypertensive medications affecting QOL; namely, erectile dysfunction (ED). Perceived ED is one of the most common reasons for discontinuing antihypertensive medications. ED perceptions matter because perceptions can become self-fulfilling prophecies-ruining Valentine's Day aspirations. To further complicate matters, prolonged exposure to elevated levels of systemic blood pressure leads to progression of atherosclerotic disease in the penile vessels as well as endothelial dysfunction. Smoking is another ED risk factor. You will find out with good history-taking that even prior to the initiation of antihypertensives in our patients, they were already experiencing some ED. Nonetheless, antihypertensive medications can exacerbate the problem. The most common culprits are the older agents, diuretics and beta-blockers. However, nebivolol (Bystolic'M) may alleviate some of the symptoms given its action in increasing the availability of vasodilatory nitric oxide. ARBs also have a favorable profile likely by virtue of nullifying the vasoconstrictive Angiotensin II. The calcium channel blockers and ACE-Is do not have any consistent evidence either way. The beta-blocker class is fascinating, because their association with ED varies depending on the specific agent. Metoprolol and carvedilol have been associated with HIGHER rates of erectile dysfunction; while atenolol and bisoprolol are intermediate in their associated rates of ED.

When discussing concerns about ED and anti-hypertensive medications with patients, a little trick is to consider using phosphodiesterase type 5 inhibitors (PDE5 inhibitors) which are effective in addressing ED in hypertensive patients. Of clinical significance is that hypertensive men with ED are more likely to comply with their antihypertensive medication when under PDE5 inhibitors (eg. Cialis'M). They can safely be co-administered with virtually all antihypertensive medications. Caution must be exercised with co-administration with alpha-blockade. Low starting doses of PDE5 inhibitors are preferred in patients already on alpha-blocker treatment. Use of nitrates is an ABSOLUTE CONTRAINDICATION to additional use of PDE5 inhibitors.

The good news is that there is finally some attention being given to the issue of sexual dysfunction in female hypertensives. The SPRINT trial is evaluating QOL issues in a subset of females and noted that HALF of this subset suffered from sexual dysfunction. Baseline analysis suggested LESS dysfunction with the use of ARBs/ACE-Is. Finally, behavioral interventions including reducing weight in obese individuals, quitting smoking, starting some exercise, treating sleep apnea, promoting a healthy diet, and addressing psychosocial stressors have all been associated with improvement in sexual dysfunction in both male and female hypertensives.

If you have specific questions related to hypertension management in your patients, Dr. Williams can be reached by email at <u>Stephen.Williams@nyumc.org</u> or by phone at 646-320-8075 (cell).

THE BP VISIT PROJECT TEAM www.CDNetwork.org/BP-Visit