Clinical Briefs in Primary Care

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Evidence-based updates in primary care medicine

Online Supplement to *Clinical Cardiology Alert, Critical Care Alert, Hospital Medicine Alert, Infectious Disease Alert, Integrative Medicine Alert, Neurology Alert, OB/GYN Clinical Alert, Primary Care Reports*

Volume 21, Number 5 May 2016

## Home BP Monitoring vs Ambulatory BP Monitoring

SOURCE: Shimbo D, et al. *J Am Soc Hypertens* 2016;10:224-234.

For the last several decades, decisions about management of hypertension (HTN) have been based predominantly on blood pressure (BP) recorded in an office, commonly known as "office BP" (OBP). Randomized, interventional HTN trials based on OBP have confirmed important clinical benefits from treatment: reductions in myocardial infarction of about 25%, stroke of about 40%, and heart failure > 50%. Nonetheless, vocal supporters for 24-hour ambulatory blood pressure monitoring (ABPM) have pointed out that ABPM correlates significantly better with cardiovascular disease (CVD) outcomes than OBP, leading to the logical conclusion that treatments based on ABPM might also provide better CVD risk reduction.

The same arguments can be made for home BP monitoring (HBPM). Since both ABPM and HBPM provide the opportunity for many more BP readings than occasional OBP, it's not surprising that either tool has better positive predictive value than OBP. Additionally, HBPM and ABPM definitions of HTN appear to be more accurate because they eliminate most white-coat HTN.

Shimbo et al performed a systematic review of ABPM and HBPM trials. While the authors were able to confirm that both ABPM and HBPM have stronger association with CVD than OBP, they were unable to determine whether one holds a distinct advantage over the other. Although clinical trials with ABPM seem to indicate a stronger association with CVD than observed in HBPM trials, trial data that include both methods of BP monitoring (ABPM and HBPM) in the same study population are few. Concordant with recent (2015) U.S. Preventive Services Task Force recommendations, clinicians should routinely use ABPM or HBPM prior to initiating treatment for HTN. ■

## Who's Right About DPP4 Agents and Heart Failure?

SOURCE: Filion KB, et al. *N Engl J Med* 2016;374:1145-1154.

Opinions about DPP4 inhibitors (e.g., sitagliptin, saxagliptin) and heart failure (HF) have vacillated between "worry" and "don't worry" for about 2 years. In the March 24, 2016, edition of the *New England Journal of Medicine*, results of an analysis performed by the Canadian Network for Observational Drug Effect Studies indicate that there is no demonstrable increase in risk for HF, as indicated by hospitalization for HF, with incretin agents (GLP1 analogues and DPP-4 inhibitors). Their conclusions are based on an evaluation of data from 29,741 hospitalizations for HF among 1.5 million patients in the United States, Canada, and the United Kingdom.

On April 6, the FDA issued a "new alert" about the potential for increased risk of HF with saxagliptin (Onglyza) and alogliptin (Nesina), as well as any combination products that contain either of these two agents.

Who's right? The FDA warnings should be taken seriously, even if other evaluators disagree — if only to maintain an appropriate standard of care. Hence, avoid prescribing the DPP4 inhibitors saxagliptin or alogliptin to patients with HF until the FDA provides further advice. In the meantime, the association with HF has not been deemed a "class effect." Therefore, other DPP4 inhibitors such as sitagliptin or linagliptin, which were not named by the FDA as proscribed for patients with HF, should be considered when clinicians wish to use a DPP4 inhibitor in patients with HF. ■

## Severe Hypoglycemia: Identifying At-risk Groups

SOURCE: Pathak RD, et al. *Diabetes Care* 2016;39:363-370.

There are numerous reasons to show a healthy respect for hypoglycemia in diabetic patients. First, hypoglycemia is responsible for many deaths in diabetics. Second, hypoglycemia may cause consequential injuries from falls and auto accidents. Third, hypoglycemia is included in the American Diabetes Association treatment algorithm list of five issues clinicians should address routinely when advancing pharmacologic treatment from metformin to polypharmacy. Fourth, patients often weigh issues about hypoglycemia risk as highly important in their decision process about advancing and adhering to medication.

Pathak et al reported results of an observational cohort study of almost 1 million adults participating in the Surveillance, Prevention, and Management of Diabetes Mellitus (SUPREME-DM) network who were treated during the 2005-2011 interval. Severe hypoglycemia was diagnosed among inpatients and patients presenting to

emergency departments. Statistically significantly higher rates of severe hypoglycemia occurred in older patients (especially those > 75 years of age) and those with chronic kidney disease, heart failure, cardiovascular disease, and depression. Pharmacologic agents associated with higher risk of severe hypoglycemia included insulin, insulin secretagogues, and beta-blockers.

Because hypoglycemia is such an important obstacle to optimized goal attainment in diabetes, clinicians may wish to factor the above-mentioned demographics into their pharmacologic decision process. ■

## Patient Health Questionnaire and Suicide Ideation

SOURCE: Simon GE, et al. *J Clin Psychiatry* 2016;77:221-227.

The most recent guidance from the U.S. Preventive Services Task Force endorses screening for depression in all adults. The Patient Health Questionnaire (PHQ) is a commonly used tool for depression screening. An attractive benefit about this screening tool is that no permission is required for copying and using the screener in clinical practice.

***CLINICAL BRIEFS IN PRIMARY CARE***™
is published monthly by AHC Media, LLC. 

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Simon et al reviewed results of PHQ screenings of more than 500,000 adults obtained during the 2007-2012 interval. Patients had visited primary care clinicians as well as mental health specialists. Among this population, there were 9203 nonfatal suicide attempts and 484 suicide deaths recorded during the same interval.

Patients who reported "thoughts of death or self-harm" on the PHQ as "not at all" were seven-fold less likely to attempt suicide in the 2 years following their screening than those who responded with "nearly every day" (0.5% vs 3.5% rate of suicide attempt). A similar relative risk of suicide death — five-fold increase in the latter group — was found.

Over time, incidence of suicide declined but remained elevated as much as two- to five-fold for at least 18 months post-positive screening. Hence, clinicians should take positive results on the PHQ seriously and institute appropriate suicide prevention methods. Unfortunately, no depression or suicide screener is perfect. More than one-third of all suicide attempts and deaths occurred within 30 days of responses by screenees who had answered "not at all" to the PHQ question, "In the past 2 weeks, have you had thoughts that you would be better off dead or of hurting yourself in some way?" ■

## Pregabalin Improves Outcomes in Chronic Cough

SOURCE: Vertigan AE, et al. *Chest* 2016;149:639-648.

Chronic cough without an evident etiology can be a challenging issue. Guidelines suggest etiologic considerations, including infectious, allergic, malignant, mechanical, and psychological issues. In the primary care setting, recommendations call for clinicians to consider a course of antihistamines/nasal steroids, inhaled short-acting beta-agonists, and proton pump inhibitors, respectively, to rule out occult allergic rhinitis/postnasal drip, cough-variant asthma, and gastroesophageal reflux disease. Speech pathology treatment (SPT) also has been shown to be effective in refractory cases. Unfortunately, even after such inclusive treatments, a not-insubstantial group of patients continues to have unexplained cough.

Vertigan et al performed a randomized, controlled trial of SPT combined with either pregabalin (up to 300 mg/d) or placebo in patients with refractory cough (n = 44). Treatment was administered for 14 weeks, and a follow-up visit 1 month post-treatment was performed to see if treatment effects persisted after discontinuation. Outcomes included cough frequency, severity, and quality of life, using recognized metrics.

Adding pregabalin to SPT improved cough severity and quality of life better than placebo. Encouragingly, improvements in outcomes were durable at the last visit, 1 month post-treatment. Pregabalin appears to provide meaningful improvement in cough for patients who have been refractory to other standard interventions. ■

## A New Topical Treatment for Peyronie's Disease

SOURCE: Twidwell J, et al. *Int J Impot Res* 2016;28:41-45.

Peyronie's disease is characterized by scarring of the tunica albuginea, which may result in angulation and/or pain when the penis is erect. While mild Peyronie's disease is largely inconsequential, unless the sufferer has cosmetic concerns about the appearance of the erect penis, moderate to severe Peyronie's disease may produce sufficient penile angulation as to make successful intercourse difficult or impossible.

Surgical intervention to modify the culprit scar lesion from the tunica is often successful, but many patients prefer less invasive interventions. Tools that have had some success with scar dissolution, such as intralesional verapamil, have not proven consistently effective in clinical trials.

H-100 oil is a combination of nicardipine and superoxide dismutase dissolved in emu oil, which is reportedly a good agent for enhancing transdermal absorption. Nicardipine blocks collagen production, and superoxide dismutase reduces inflammation through scavenging of free radicals.

Study subjects (n = 24) were randomized to H-100 or placebo. Both agents were applied twice daily to the penile shaft. At the 6-month endpoint of the trial, men who applied H-100 demonstrated significant improvements in penile curvature and reductions in erection pain. Treatment was well tolerated, with only one patient discontinuing due to a penile rash. H-100 is a promising agent for a vexing disorder that otherwise often requires surgical intervention. ■