

HOLLADAY HEALTHCARE PHARMACY

HOLLADAY HAPPENINGS

VALUE - DEDICATION - QUALITY



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F-A-S-T

Stroke is a disease that affects the arteries leading to and within the brain. Even though stroke is more common in the elderly population, it may occur in infants, children, and young adults. Nearly 800,000 people in the United States have a stroke every year, with about three in four being first-time strokes. Statistics report someone in the United States has a stroke every 40 seconds.

There are 3 types of stroke:

Ischemic stroke occurs as a result of a blockage within a blood vessel supplying blood to the brain. These account for approximately 87% of all stroke cases.

Hemorrhagic stroke occurs when a weakened blood vessel ruptures. The most common cause of hemorrhagic stroke is uncontrolled high blood pressure.

Transient Ischemic Attack, TIA, is a stroke caused by a temporary clot. These are often called “mini strokes” but should be taken seriously.

Age, gender, family history, and race are stroke risk factors one cannot control. However, one can decrease their risk for stroke by engaging in regular physical activity, eating a healthy diet low in sodium and cholesterol and high in fruits and vegetables, and refraining from smoking. Ensure you have regular checkups if you have high blood pressure, diabetes, atrial fibrillation, or other heart disease.

To spot warning signs of a stroke remember the letters: **F-A-S-T**.

- F**ace drooping
- A**rm weakness
- S**peech Difficulty
- T**ime to call 911

Clot-busting drugs and medical devices have made stroke largely treatable, but every second counts. The faster you are treated, the more likely you are to recover without permanent disability. If you are unsure, call 911 anyway.

Rachel K. Barbour, PharmD, is a consultant pharmacist with Holladay Healthcare Pharmacy.

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NUPLAZID (Pimavanserin) **The First Drug Approved for Parkinson's Delusions or Hallucinations**

In 2016, the U.S. Food and Drug Administration approved Nuplazid (pimavanserin) tablets, the first drug approved to treat hallucinations and delusions associated with psychosis experienced by as many as 50 percent of the estimated one million people in the US with Parkinson's disease.

Nuplazid had been granted breakthrough therapy designation which is a program designed to expedite the development and review of drugs that are intended to treat serious conditions and where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over available therapy. It was also granted a priority review. The FDA's priority review program provides for an expedited review of drugs that offer a significant improvement in the safety or effectiveness for the treatment, prevention, or diagnosis of a serious condition.

The effectiveness of Nuplazid, an atypical antipsychotic, was shown in multiple clinical trials of over 1200 patients. Nuplazid was shown to be superior to placebo in decreasing the frequency and/or severity of hallucinations and delusions without worsening the primary motor symptoms of Parkinson's disease. The average age in the clinical trials was 71.

The main drug interactions with Nuplazid are with strong CYP3A4 inhibitors (eg. itraconazole, ketoconazole) and the dose should be decreased to 17mg. daily instead of the usual adult dose of 34mg. daily. Nuplazid may also prolong QT interval so it should be used with caution with other drugs which do the same (eg. some antiarrhythmics such as amiodarone and some antipsychotics such as ziprasidone and chlorpromazine.) Concomitant use of strong CYP3A4 inducers (eg. phenytoin and carbamazepine) may reduce pimavanserin exposure resulting in a decrease in efficacy. Patients should be monitored for reduced efficacy and an increase in dose may be considered. No dosage adjustment is necessary when administered with carbidopa/levodopa, the primary treatment for Parkinson's disease.

The most common side effects are nausea, peripheral edema and confusional state. Nuplazide may be taken with or without food. *Candice Teeter, RPh., is a consultant pharmacist with Holladay Healthcare Pharmacy.*

THE ROLE OF THE CONSULTANT PHARMACIST

Consultant Pharmacy or senior care pharmacy practice is unique in that it is population specific rather than site specific. Senior care pharmacists have specialized knowledge in geriatrics, geriatric pharmacotherapy, and the unique medication-related needs of the senior population. In providing person-centered care, senior care pharmacists look at their patients holistically – as individuals for whom quality of life and quality of care are mutually significant and necessary. Through medication regimen review, these pharmacists minimize the health risks of seniors taking medications that could be inappropriate and recommend more appropriate choices, including discontinuing unnecessary medications. Untreated or undertreated health concerns are identified and treatment recommendations are made, taking into account potential side effects and drug/food/disease interactions. The entire medication regimen is carefully reviewed, including "PRN" medications, OTC medications, dietary supplements, and herbal products, to ensure that doses are correct, safe for the patient and also affordable. The Consultant Pharmacist participates in continuing education courses to further self-development, and also is involved with educating the clinical team as to medication management. Lastly, the Consultant Pharmacist ensures appropriate clinical practice guidelines and regulations are met and followed by the facility.

Jerry D. Evans PA, PharmD, is a consultant pharmacist/ Director of Clinical Services with Holladay Healthcare Pharmacy.

IS CRANBERRY HELPFUL?

Cranberry as a supplement comes in many dosages and forms and several brand names which all claim that cranberry may help prevent urinary tract infections (UTIs). But does it actually work? The reason behind using cranberry as a way to prevent UTIs is that it is thought to help in two ways. Cranberry helps to acidify the urine, which decreases the viability of Escherichia coli (E. coli). There is also a specific compound in cranberry called a proanthocyanidin (PAC) which works as an anti-adhesion agent against E. coli.

A study published in BCM Infectious Diseases found that 72 mg of PACs were required to reduce E. coli virulence and prevent bacterial adhesion for 24 hours. The study followed patients for one year to prove that there was a significant decrease in the number of symptomatic UTIs. Most other studies available did not find cranberry to have a significant difference in those taking it compared to those who were not, and they did not say what PAC amount was given. Some studies also found that cranberry caused altered mental status, GI disturbances, weight loss and some patients experienced a skin or soft tissue event.

When considering if a patient would benefit from a cranberry supplement, consider that most cranberry products don't list the number of PACs in each tablet, so it is difficult to determine what the effective dosage should be. There is also an expense to giving it and the possibility of side effects. Unfortunately, while drinking cranberry juice offers some health benefits, it has not been found helpful for UTIs at this point. If a cranberry supplement is to be given, it's recommended to use a brand that has the United States Pharmacopeia (USP) seal to ensure the product's strength, quality and purity. *Christy Legner, PharmD, MS, BCGP, is a consultant pharmacist with Holladay Healthcare Pharmacy.*

NEW ADVANCEMENTS IN THE TREATMENT OF HEART FAILURE

Two new agents, Corlanor® and Entresto®, have recently been FDA-approved for the treatment of heart failure. The 2013 ACCF/AHA Management of Heart Failure practice guidelines have been updated to provide guidance for prescribing these new agents in addition to their role in clinical practice.

Entresto® is a combination agent that includes the moieties of a neprilysin inhibitor, sacubitril, and an angiotensin receptor blocker (ARB), valsartan. In the PARADIGM-HF trial, sacubitril/valsartan was found to be superior to enalapril in reducing hospitalizations for worsening heart failure, cardiovascular mortality and overall mortality. Based on this evidence, it is recommended as a replacement to an ACE inhibitor to further reduce the rate of hospitalization and death in patients with heart failure with reduced ejection fraction (HFrEF) whom remain symptomatic despite optimal treatment. It is important to note that combined treatment of an ACE inhibitor and sacubitril/valsartan is contraindicated. If switching from an ACE inhibitor to sacubitril/valsartan, a 36-hour washout period should be allotted. Despite the success of sacubitril/valsartan in the PARADIGM-HF trial, some issues remain when initiating this therapy in clinical practice, including a higher incidence of symptomatic hypotension when compared to enalapril and lack of long-term data.

Corlanor® (ivabradine) is an If current inhibitor in the sinoatrial node that provides benefit by slowing down the heart rate. The average reduction in heart rate is 10 beats per minute. In the SHIFT trial, ivabradine reduced the combined endpoint of hospitalization for worsening heart failure or cardiovascular death. This agent is indicated in a very narrow subset of patients which includes patients with symptomatic HFrEF (LVEF <35%), in sinus rhythm and with a heart rate >70 beats per minute despite receiving a beta blocker at an evidence-based dose. It is important to note that ivabradine must be titrated based upon a goal heart rate of 50 to 60 beats per minute.

References:

Corlanor (ivabradine) [package insert]. Thousand Oaks, CA: Amgen, Inc.; 2015.

Entresto (sacubitril and valsartan) [package insert]. East Hanover, NJ: Novartis; August 2015

McMurray JJ, Packer M, Desai AS, et al; PARADIGM-HF Investigators and Committees. Angiotensin-neprilysin inhibition versus enalapril in heart failure. *N Engl J Med.* 2014;371(11):993-1004.[PubMed 25176015]10.1056/NEJMoa1409077

Yancy CW, Jessup M, Bozkurt B, et al; American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on practice guidelines. *Circulation.* 2013;128(16):e240-327.[PubMed 23741058]10.1161/CIR.0b013e31829e8776

Meagan Scott, is a PharmD Candidate 2017, Holladay Healthcare Pharmacy Intern.

MEET THE STAFF : TONY TATUM

For over 28 years of service at Holladay, Tony has been a vital member of the team. Tony is a Floor Technician in the pharmacy where he diligently fills orders and compounds. Tony also implements the tote process, which expedites medication delivery to Holladay's facilities timely and accurately.

When not at Holladay, Tony enjoys spending time with his family (Michele, Kellie and Kierston), frequently working out together or practicing on a ball field. He also enjoys fishing at the coast and playing a round of golf if time permits. On Saturdays, you may find Tony at Keatons, eating the "greatest BBQ chicken in the state". He encourages others to, "check them out, you will not be disappointed".

"Just to know you have a hand in the welfare of others makes being a part of the Holladay team rewarding and fulfilling," says Tony. And at Holladay, the residents they serve are paramount. "Being a part of a group of people that can work together and compliment each other to achieve a common goal, makes coming to work at Holladay like coming home," added Tony. "I am glad to be home." And Tony.... Holladay is honored that you work at a place you can call "home".

SEE YOU AT LEADING AGE!

Holladay Healthcare Pharmacy will be exhibiting at the 61st Annual LeadingAge NC Spring Conference Trade Show. The conference is being held May 15th -18th at the beautiful Pinehurst Resort in Pinehurst, NC. The theme for this year's conference is 'Power of Purpose'. Holladay is proud to be a sponsor and business partner with LeadingAge NC. Please visit the Holladay Team at booth number 33 for some great prizes and information!

H.E.L.P. 2017 Holladay Healthcare Pharmacy - Leaders in Education

Holladay Healthcare Pharmacy is dedicated to educating the long term care community in North Carolina. Holladay's annual H.E.L.P. (Holladay Educational Learning Program) is one of the venues that enable Holladay to achieve this goal. Holladay's 8th Annual H.E.L.P. program was a sold out event, held on March 9th-10th at the Proximity Hotel in Greensboro, NC. Attendees enjoyed themselves while receiving the best, high-quality continuing education in the area. The topics were pertinent and timely to long term care today, ranging from developing a plan for drug diversion and prevention to innovative technology options. Highlighting the 2017 agenda was the well-renowned Doug Blizzard (CAI), who provided attendees with useful tools and strategies for overcoming difficult customers. Terri Johnson Harris, JD (SmithMooreLeatherwood Attorney at Law), discussed risk management through better documentation and communication. Also on the agenda this year was Ellen Smith (PACE of the Triad), who shared ideas to help residents through the end of life process. Both administrators and nurses were awarded CE hours for attending the event. Thank you to the 2017 H.E.L.P. sponsors (listed on the page 1) who made this event possible.



Holladay Healthcare Pharmacy
 2560 Landmark Drive
 Winston-Salem, NC 27103
 1-800-848-3446
 holladaycare.com

HEART DISEASE APPLICATION for FREE:



Access current guidelines and risk calculator with the American College of Cardiology’s clinical guideline recommendations. Use interactive tools such as risk scores, dosing calculators, and algorithms through the ACC’s Guideline Clinical App. ACC’s Guideline App is free to both members and nonmembers.

This app is the ACC’s mobile home for clinical guideline content and tools for clinicians caring for patients with cardiovascular disease. The App also includes features such as customizable bookmarks, note-taking, and email-able pdfs.

Current guidelines in the App include:

- Atrial Fibrillation (AF), • Cardiovascular Risk (CV Risk), • Coronary Artery Bypass Graft (CABG),
- Cholesterol (Chol), • Device-Based Therapy (DBT), • Dual Antiplatelet Therapy Update (DAPT)
- Heart Failure (HF), • Lifestyle (Lstyle), • Non–ST-Elevation Acute Coronary Syndromes (NSTEMI)
- Obesity, • Percutaneous Coronary Intervention (PCI), • Stable Ischemic Heart Disease (SIHD)
- Perioperative Management for Noncardiac Surgery (Periop), • Supraventricular Tachycardia (SVT)
- ST-Elevated Myocardial Infarction (STEMI), • Valvular Heart Disease (VHD)

Not only is ACC’s Guideline App free to both members and nonmembers but they are actively adding updates, more guideline content, and tools. This APP is able to send feedback to the ACC directly from the Information page as well as post a review in the App Store which will help find new and better ways to deliver guideline content to clinicians. This is an excellent cardiac resource all in one place.

Jennifer Hamilton, PharmD, BCGP is a consultant pharmacist with Holladay Healthcare Pharmacy.

ALLERGY TRUE/FALSE

1. Allergies can develop before you are born. True or False
2. Heredity does not influence your risk of developing allergies. True or False
3. Hay fever is the most common of the allergic diseases. True or False
4. An allergic reaction to food can be induced by exercise. True or False
5. Dust mites thrive in cold, dry places. True or False

1. True 2. False
 3. True 4. True
 5. False