

# HOLLADAY HEALTHCARE PHARMACY

# HOLLADAY HAPPENINGS

**ACCURATE - RESPONSIVE - FLEXIBLE**



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## MELATONIN: THE "HORMONE OF DARKNESS" FOR OLDER ADULTS

Melatonin is a hormone naturally produced in the brain that helps regulate sleep/wake cycles. Its production is suppressed by light, and levels are lower during daylight hours. Darkness causes melatonin production to increase, and this sends a message to the body to prepare for sleep. 1

Melatonin production and levels decline in aging adults. 2 Supplementing melatonin may help individuals who have insomnia due to low levels of endogenous melatonin. 1 In the US, melatonin can be purchased in any dose without a prescription. While the optimal dose of melatonin for older adults is unknown, one systematic review of the literature in 2014, which sought to determine the optimal dose for adults aged 55 and above advised using the lowest possible dose of immediate-release melatonin (ranging from 0.3mg to a maximum of 2mg) preferably one hour before bedtime to mimic normal physiological levels and rhythm. Higher doses could lead to next day drowsiness and possible loss of effectiveness. 2

Oral melatonin is well tolerated. The most common adverse effects reported were drowsiness (20%), headache (7.8%) and dizziness (4%), but these effects did not occur more frequently than with placebo. 1

Survey FAQs for the Long Term Care regulations updated 7/11/18 state that: "Melatonin does not fall under the requirements for psychotropic medications. Melatonin is a natural hormone that is classified as a dietary supplement by the Food and Drug Administration and, therefore, is not subject to the requirements of hypnotics under the new psychotropic medication category at 483.45(c)(3). However, residents should still be monitored with regard to benefits, risks, and potential adverse consequences." 3

Resources:

1 Natural Medicines Comprehensive Database accessed 12/11/18

2 Drugs Aging 2014; 31: 441-51

3 <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Downloads/LTC-Survey-FAQs.pdf> accessed 12/11/18

*Charlotte Matheny, PharmD, CGP is a consultant pharmacist with Holladay Healthcare Pharmacy.*

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*10th Annual  
Holladay Educational  
Learning Program*

**H.E.L.P. 2019**

**MARCH  
21st-22nd**  
Proximity Hotel  
Greensboro, NC

## **Xofluza or Tamiflu for Treating the Flu?** *Which drug would you prescribe/recommend for your patients?*

Xofluza (baloxavir marboxil) was approved in October 2018 and is the first new oral antiviral for treating influenza in nearly 20 years. One big difference is that Xofluza is one oral dose of 40 mg or 80 mg (based on weight) compared to the Tamiflu (oseltamivir) dose of 75 mg twice a day for 5 days for patients >12 years old. Both medications MUST be started within 48 hours of the onset of flu symptoms. Although Xofluza has a different mechanism of action from Tamiflu, both medications reduce symptoms by ONLY a day.

Although Xofluza is indicated for the treatment of uncomplicated influenza for patients 12 years old and older, patients over the age of 65 were EXCLUDED from the clinical trials so there is no data for using it in that population which would include, of course, most nursing home residents. Therefore it is not known if older patients respond differently from younger adults OR if there are more adverse events in this population. Tamiflu is approved for patients as young as 2 weeks old and the initial studies included 948 people >65 years of age and 329 people >75 years old. Tamiflu is now also indicated for prevention of influenza at a dose of 75mg daily for 10 days. Xofluza is indicated for treatment only.

Xofluza dosing for patients 40 kg to <80 kg is a single dose of 40 mg. For patients who are at least 80 kg, the dose is 80 mg. Most common adverse effects (>1%) are diarrhea, bronchitis, headache and nausea. Most common adverse events (>1%) for Tamiflu are nausea, vomiting and headache. Xofluza should not be given with medications containing calcium, iron, magnesium, selenium or zinc as these medications can impair the absorption. The cost of Xofluza is about \$150 while Tamiflu generic (oseltamivir) is \$100. There are some private payers who may not cover the cost of Xofluza.

It is important to remember that these are not a substitute for getting the flu vaccine.

*Candice Teeter, RPh., is a consultant pharmacist with Holladay Healthcare Pharmacy.*

### **H.E.L.P. 2019** **Holladay Educational Learning Program** *Celebrating 10 Years in Educating the NC LTC Community*

#### **REGISTER NOW** **H.E.L.P. 2019**

- GO TO: [www.nwahec.org/57147](http://www.nwahec.org/57147)
- Select "Register for Event"
- If not in AHEC system, enter profile information and return to registration link to register
- Review & update profile information
- Complete all required parts of registration form
- Confirmation will be emailed

Each year brings new challenges and information to long term care. For those who are looking to expand their knowledge, expertise and skills, please join Holladay Healthcare Pharmacy for the 10th annual H.E.L.P. symposium. H.E.L.P. 2019 will be held on March 21st - March 22nd in Greensboro at the Proximity Hotel. Administrators and nurses will be awarded contact hours for attending.

The Holladay H.E.L.P. 2019 committee has worked hard to find top-notch presenters, educators and topics for this year's symposium. The agenda explores topics ranging from Techniques to Improve Employee Retention to CRE Management in LTC. Also highlighting Holladay's 2019 program is Bryon K. Bruce, Diversion Group Supervisor, for the Drug Enforcement Administration. Byron will discuss Controlled Substance Audit Readiness.

Attendees will also enjoy meeting and connecting with other leaders in long term care. Space is limited and the H.E.L.P. symposium fills up quickly. Please visit [holladaycare.com](http://holladaycare.com) or call 1-800-848-3446 for a complete list of topics and information.

#### **MEET THE STAFF:** **Susie Tickle**

Holladay is proud to spotlight Susie Tickle in the winter issue of *Holladay Happenings*. Susie graduated from UNC-Chapel Hill with a Bachelor of Science degree in Business Administration. She has been married to David for 24 years and is the proud mother of their son Dean, who is a sophomore at UNC-Charlotte.

Susie has been an employee at Holladay Healthcare Pharmacy for over 30 years. She began her career at Holladay as summer help in the packing department during college and then worked many years in the billing department. Susie has been at the helm of Holladay for the past 6 years in her role as Director of Operations.

When Susie is not at the pharmacy, she enjoys watching sports, especially when the Tar Heels are playing. Susie also loves to read and has at least one book by her bedside table. One of her recent favorites is *The Last Ballad* by Wiley Cash. Anyone that has been by Holladay Pharmacy during the holiday season, is well aware that Susie is a *total Christmas fanatic*. She listens to Christmas music year round and even enjoys the crowds and traffic when Christmas shopping!

Holladay is fortunate to have a dedicated, loyal leader, who not only is an expert in the industry, but truly cares about the Holladay employees and the customers and residents served.

#### **HOLLADAY HEALTHCARE PHARMACY : Out in the Community**

The **North Carolina Health Care Facilities Association's Annual Conference** will be held February 24th-27th at the Koury Convention Center in Greensboro, NC. Holladay will be in attendance supporting the NCHCFA Association and participating in the Casino Royale theme. Come by the Holladay booth at the trade show on February 26th, for some fun, prizes and education. Please visit <https://www.nhcfa.org> for more information.

## The Season of IVs - HELPFUL GERIATRIC IV TIPS

- **Avoid applying too much friction when preparing the skin.** Remember, older adults have more fragile skin and too much friction may damage surface tissues, therefore putting them at risk for bacterial infection.
- **Use the smallest catheter workable.** Although the size of the catheter usually depends on what treatment the patient needs, nurses should consider the patient's delicateness. Older adults experience changes in their skin's tone and elasticity, and are more prone to bruising. Due to loss of subcutaneous tissue, their veins are also less stable and are at high risk of developing vein tears. According to Infusion Nurses Society standards, smaller-gauge needles are great for older patients who are in need of antibiotic administration or hydrating solutions by infusion pump.
- **Know the vein's depth.** This is to determine how far you will be inserting the needle, and what angle you can use in inserting. Most older adults have very shallow veins and require an almost flat insertion angle (approximately 10 to 20 degrees).
- **If possible, do not use a tourniquet.** Their veins are usually already visible and palpable even without tourniquet. Tourniquet increases pressure, thus only increasing the risk of tears. Instead, you can just lower the patient's arm or apply warm compress prior to insertion. When tourniquet is needed, only use those that are made of soft materials. Apply it gently as putting it too tight can cause venous "blows" and hematoma.
- **Stabilize the vein.** Apply traction to the side of the insertion site with your non-dominant hand, so that there wouldn't be unnecessary movements during insertion.
- **After stabilizing, insert the catheter ON TOP of the vein.** Establishing a side access may only push the vein away from the needle. **Insert the catheter "slowly but steadily".** Avoid rushing. This applies to insertion of any I.V. device to patients of all ages. Using the bevel-up approach, insert the needle slowly on top of the vein while making sure that the vein is still stabilized. Try to keep it in a 20 to 30 degree angle or almost flat with the skin. After penetrating the vein with one short stroke, advance the needle and the cannula slowly.
- **Hypoallergenic tape.** The skin of older adults has lost its normal tone and elasticity. You have to make sure that you secure the catheter with enough hypoallergenic tape or dressing.
- **Apply pressure.** After you have removed the needle, you may need to apply pressure long enough until the bleeding stops. You should consider that older adults tend to have prolonged bleeding times. This is because in older adults, clot formation may take longer to occur, even if they're not using any anticoagulant.
- **In case bruising occurs, apply cold compress for 24 hours.** You can then apply warm compresses to further promote hemostasis.
- **Immobilize the catheter properly.** This is another way of lowering the risk of skin tearing. Also, veins must be stabilized well, as older patients tend to roll upon their insertion sites. This may cause bleeding and, worse, infiltration.

Assess the patient regularly for signs and symptoms of infection, fluid overload, and infiltration. Take note that older adults who are infected tend to show more subtle signs and symptoms, including lethargy, decreased appetite, change in mental status, tachycardia or bradycardia, and subnormal temperature. It may be a challenge to some, but as long as you know the proper way to do it, there wouldn't be a problem. Hopefully, you would keep all these strategies in inserting an IV device in older adults in mind.

Velarmino Francisco, M. (2014, June 23). How to Insert an I.V. Device in an Older Adult. Retrieved from [www.nursebuff.com](http://www.nursebuff.com)

For further information on IV therapy, please contact Holladay Healthcare Pharmacy's Nurse Consultant and IV Specialist Becky Cross at 1-800-848-3446.

## FAST FRIDGE FACTS

There are many medications and vaccines that require refrigeration to maintain their integrity. These medications should be kept in closed and labeled containers while stored in the refrigerator. They must also be stored separate from food (applesauce) or juices used to administer medications. Personal food or drinks should not be stored in medication refrigerators. Any refrigerated control medications must be stored in a locked container that is secured to the refrigerator.

The temperature should always be maintained between 36 and 46 °F. A log should be kept of daily temperature readings. If vaccines are kept in the refrigerator the temperature should be recorded twice daily, otherwise it should be recorded once daily. An example log is provided in the Holladay Policy and Procedure Manual and may be used by facilities. If at anytime the temperature falls outside of the desired temperature the following steps should be followed:

1. Make an appropriate adjustment to the refrigerator control then recheck and record the temperature 15-30 minutes later.
2. Move the product to an alternate storage, label it as \*Do not use\* and contact the pharmacy. The pharmacy will help determine if the products are still viable and what action should be taken.
3. Obtain the "Refrigerated Storage Troubleshooting Record" from the Holladay Policy and Procedure Manual and complete. Use this document, or similar form, to record the details of the event and all actions taken.

## Venipuncture Skin Prep Tips

- A chlorhexidine-based antiseptic is recommended for skin prep in patients older than 2 months of age.
- The antiseptic solution should be allowed to dry before making the skin puncture.
- Do not apply prophylactic topical antimicrobial or antiseptic ointment or cream to I.V. site.

Citation: U.S. Department of Health and Human Services (2017, Nov. 20). Guidelines for the Prevention of Intravascular Catheter-Related Infections. Retrieved from [www.cdc.gov/infectioncontrol/guidelines](http://www.cdc.gov/infectioncontrol/guidelines)



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**d Doximity: A Medical Network APP**

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**NEW YEAR HEART HEALTHY MENU QUIZ**

1. Which is better for you (a)avocado toast or (b)peanut butter toast?
2. Which is better for you (a)greek yogurt or (b)regular yogurt?
3. Which is better for you (a)chicken or (b)fish?
4. Which is better for you (a)coffee or (b)tea?
5. Which is better for you (a)hamburger or (b)hotdog?

Answers Below:

1. (a) Avocado toast
2. (a) Greek yogurt
3. (b) Fish
4. (b) Tea
5. (a) Hamburger



<https://www.aarp.org/health/healthy-living/info-2018/heart-healthy-foods-quiz.html#quest7>