OUR LADY OF THE LAKE RMC

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Staff Spotlight

Miya Green, CPhT

"We are shaped by our thoughts; we become what we think. When the mind is pure, joy follows like a shadow that next leaves." - Buddha

Miya is a new member of the pharmacy team and she loves being a part of preparing and delivering medications to our patients. She loves OLOL because she meets new people every day. In fact, her dream job would be to be a pharmacy technician if she could work from home.

Miya loves to cook and create new and interesting dishes. She still loves the traditional foods though including pork and beans with wieners and rice. When asked what part of a salad she would like to be, she said "spinach because it's a super food and the foundation of a great salad." But she still likes to indulge in white chocolate Kit-Kats.

The most important thing to Miya is her son, Anthony, and making sure he is the happiest little boy on the planet. Joy to her is waking up every day, knowing and believing that she is blessed. Her advice to all of our new hires is to remain humble in your position. "Never be afraid or 'too cool' to learn everything you can to be great."

Welcome Miya!

Changes in Heart Failure Management

By Katie Ducote, PharmD, BCPS

The American College of Cardiologists (ACC), American Heart Association (AHA) and Heart Failure Society of America (HFSA) jointly provide guidelines for the management of heart failure in the United States. The committee updates the guidelines frequently to reflect current literature and trends within the disease state. Most recently, they developed a focused update published this year choosing to expand on new pharmacologic therapy.

Since the development of the 2013 guidelines, the incidence of heart failure has declined primarily for patients with reduced ejection fraction (HFrEF, <40%). Risk of cardiovascular death has decreased for patients with preserved ejection fraction (HFpEF), however overall hospitalizations, non-cardiovascular death and the prevalence of preserved ejection fraction heart failure poses a unique challenge. Treatment of HFpEF is driven by symptoms and managing the patient's other comorbid conditions.[1]

The development of two new pharmacologic classes has energized the treatment of heart failure and added new options for chronic sufferers. The two new classes are neprilysin inhibitors (sacubitril) and I_f current inhibitors (ivabradine). These two classes have earned recommendations within the guidelines based on current literature supporting their use. [2]

Sacubitril is the novel neprilysin inhibitor. Neprilysin is an endogenous enzyme that is responsible for the degradation of natriuretic peptides, bradykinin, adrenomedullin and other vasoactive peptides responsible for decreasing neurohormonal activation, vascular tone, cardiac hypertrophy and sodium retention. Inhibition of neprilysin preserves the body's natural mechanisms.

PARADIGM-HF was a randomized controlled trial of the combination sacubitril and valsartan versus enalapril in patients with HFrEF on stable doses of beta blockers. The combination was shown to significantly reduce the rate of cardiovascular death or heart failure related hospitalization when compared to enalapril.[1] In October of 2015, the FDA approved this new medication under the brand name Entresto™. Entresto is a fixed dose combination with unique dosing. It is contraindicated in patients currently taking another ACE-inhibitor or ARB and those with severe renal impairment.[3] Angiotensin receptor– neprilysin inhibitors were added to guidelines as one of three options for renin-angiotensin system inhibition in patients with chronic HFrEF.[2]

Ivabradine selectively and specifically inhibits the hyperpolarization-activated cyclic nucleotide-gated (HCN) channels (f-channels) within the sinoatrial (SA) node of the heart. This disrupts the flow of ions and prolongs diastolic depolarization and reduces the heart rate.[4]

This medication was shown to reduce cardiovascular death and heart failure hospitalizations in patients with HFrEF in sinus rhythm with a heart rate greater than 70 beats per minute despite adequate beta blockade.[1] In April of 2015, the FDA approved this new medication under the brand name Corlanor™. Corlanor is a twice daily medication. It is contraindicated in patients with acute decompensation, hypotension, sick sinus syndrome or third degree AV block. Patients must have a rest heart rate of greater than or equal to 70 beat per minute on maximum tolerated beta blockers prior to initiation.[4] Ivabradine was added the guidelines as to help reduce hospitalizations in patients with symptomatic HFrEF receiving guideline directed evaluation and management (GDEM).[2]

(Continued on Page 2)

The Newsletter Committee extends our heartfelt sorrows to the members of our pharmacy team and Our Lady of the Lake family affected by the flooding. We ask everyone to lift them up in their thoughts and prayers.

If you have not been affected and have a network of friends in family in the area able to help, please reach out to them and ask them to donate clothes, shoes, toiletries, etc. to help our pharmacy staff. Administration is collecting your donations. The Foundation Office on the first floor of HVI is accepting monetary donations. We appreciate your help!

Heart Failure (cont.)

Pharmacists have a significant role to play in GDEM. The term developed by the guideline developers refers to care defined by the ACA/AHA Class I recommendations (strong recommendation, benefits far outweigh risks) which are limited to treatments, drugs and devices.[2] By staying abreast of new guidelines, new pharmacologic classes and assisting providers in titration of mortality reducing heart failure agents, the multidisciplinary team can work together to decrease hospitalizations and death in heart failure patients.

References

1. Fonarow, Gregg, Clyde Yancy, and Paul Heidenreich. "2016 Update To Heart Failure Clinical Practice Guidelines". 2016. Presentation.
2. Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE Jr, Colvin MM, Drazner MH, Filippatos G, Fonarow GC, Givertz MM, Hollenberg SM, Lindenfeld J, Masoudi FA, McBride PE, Peterson PN, Stevenson LW, Westlake C. 2016 ACC/AHA/HFSA Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Failure Society of America. Circulation. 2016 May 20. pii: CIR.0000000000000435. [Epub ahead of print] PubMed PMID: 27208050.
3. Entresto [package insert]. East Hanover, NJ: Novartis Inc; August 2015
4. Corlanor [package insert]. Thousand Oaks, CA: Amgen Inc; April 2015.

For more information on heart failure, please visit AHA.org

ISMP Safety Practice Guidelines

InPharmation will be bringing you a new series from the ISMP IV PUSH Safety Summit in 2015

Safe Practice Guideline 1: Acquisition and Distribution of Adult IV Push Medications

1.1 To the greatest extent possible, provide adult IV push medication in a ready-to-administer form (to minimize manipulations outside of the pharmacy sterile compounding area).

Medication errors associated with administration of the wrong dose and/or concentration are believed to be more prevalent when frontline practitioners are provided with a parenteral product that requires additional manipulation at the bedside, such as partial dosing, reconstitution or dilution. To avoid unnecessary, error prone complexities and risk of contamination, hospitals should evaluated their products and switch to ready-to-administer formulations as much as possible.

1.2 Use only commercially available or pharmacy-prepared prefilled syringes of appropriate IV solution to flush and lock vascular access devices

In support of the CDC initiative to reduce potential for product, syringe or needle contamination caused by unnecessary manipulation, instance when commercially available prefilled syringes are available should be utilized. If they are unavailable, the CDC recommends the proper use of single-dose vials over multiple-dose vials.

Safety Opportunities

Remember to manually check for drug interactions when verifying orders for warfarin since Cerner does not have warnings for certain interactions. The “FAB Four” drugs have the most significant interactions with warfarin (all increase the INR)

1. Fluconazole (Diflucan™)
2. Amiodarone (Cordarone™)
3. Sulfamethoxazole-trimethoprim (Bactrim™)
4. Metronidazole (Flagyl™)

However, many other drugs interact with warfarin, so it is always a good idea to run a drug interaction check before verifying a new warfarin order.

Regulatory

Recent FDA Drug Approvals

- **Lixisenatide (Adlyxin)** is a glucagon-like peptide-1 receptor agonist approved for type 2 diabetes to improve glycemic control that comes in a single dose pre-filled pen for subcutaneous administration.
- **Dronabinol Oral Solution (Syndros)** is a pharmaceutical cannabinoid approved for anorexia associated with AIDS, as well as nausea and vomiting associated with chemotherapy in patients who have failed to respond to conventional antiemetic treatments.
- **Cholera Vaccine (Vaxchora)** is an oral, live attenuated vaccine approved for active immunization against cholera caused by Vibrio cholerae serogroup O1 in adults 18 to 64 years of age.

FDA Med Safety Alert

The FDA has increased the severity of the boxed warnings for all dosage forms of fluoroquinolones to limit the use to patients with no alternatives. While the FDA agrees these drugs are effective for serious bacterial infections, they stated the use needs to be limited due to the serious side effects involving tendons, muscles, joints, nerves, and the central nervous system. They highlight the side effects of the fluoroquinolones can be permanent and can occur at any point from hours to weeks after exposure.

Louisiana Board of Pharmacy

New Laws from 2016 Legislature Affecting Pharmacy Practice

HB 671 (Act 310) effective 08-01-2016: Amended laws governing penal pharmacy permits. Penal pharmacies may now accept returned prescription medications previously dispensed to offenders and then re-dispense those same medications to other offenders. This differs from community pharmacy permits which are not allowed to return and re-use prescription medications

HV 1007 (Act 370) effective 06-05-2016: Amended the state Control Substances Act. New legislation allows a pharmacist to dispense naloxone or another opioid antagonist pursuant to a non patient-specific standing order according to rules to be promulgated by the Board of Pharmacy. The BOP will meet on August 10 to discuss.

SB 56 (Act 189) effective 08-01-2016: Amended the state Prescription Monitoring Program (PMP). A sentence was added to the law requiring the LA BOP to establish standard for the retention, archiving and destruction of the records of the PMP database. Currently, the LA BOP is housing all transactions for all controlled substances since the beginning of collection in July 2008.

SB 180 (ACT 192) effective 05-26-2016: Amended the state Controlled Substances Act. Current law states that a maximum 10 day supply of schedule II or III opiates may be dispensed when prescribed by a practitioner not licensed in Louisiana. The pharmacist must also notify the prescriber of the limited supply dispensed and the cancellation of the remainder of the prescription including refill. An amendment in 2015, stated this was not applicable if the pharmacist has access to the PMP in the state when the prescriber is licensed (currently only Arkansas and Mississippi). The 2016 amendment further indicates that the dispense limit will not apply if the prescriber indicates a diagnosis of cancer or terminal illness on the prescription. If the prescriber fails to include it on a written schedule II opiate, the pharmacist may verify the diagnosis with the prescriber and document it on the prescription form.

SB 271 (Act 96) effective 05-19-2016: Amended the state Controlled Substances Act. Changed wording in the law permitting the dispensing of marijuana for therapeutic purposes to "recommending" instead of "prescribing" marijuana and some other minor modifications. The Board is collaborating with the Board of Medical Examiners and the Dept. of Agriculture and Forestry to draft rules to implement the legislation. You can follow their progress on the boards website at:

www.pharmacy.la.gov

INPHARMATION EDITORIAL STAFF

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Reminders

Please join the Healthy Lives Crew in the Auditorium on Fridays in August from 1-2pm. They will be reviewing the following topics each session. Sign up in HealthStream to reserve your spot.

August 19th: Establishing and Maintaining Good Credit

August 26th: Saving for Retirement

September 9th: Getting Out of Debt and Saving

September 16th: Establishing and Maintaining Good Credit

September 30th: Understanding Team Member Benefits