.....Continued from page 2

Bacterial conjunctivitis

Patients usually present with mucus buildup in the eye which refills when wiped away, it is thicker and more opaque than what is typically seen in patients with viral or allergen related conjunctivitis; **patients are contagious as long as this mucus is present or for 24 hours after starting antibiotics.**[1,6] Most cases of bacterial conjunctivitis resolve within 1 to 2 weeks on their own. However, evidence has shown that the use of **any topical broad-spectrum antibiotic** is reasonable and beneficial in bacterial conjunctivitis, relieving symptoms and reducing duration.[1,6] **All patients who wear contact lenses should be treated** with topical antibiotics to prevent bacterial keratitis (bacterial infection of cornea) and referred to an ophthalmologist.[1] Topical corticosteroids may potentiate bacterial conjunctivitis; making their use inappropriate.[1] Any one of **the following antibiotic therapies** are appropriate for the use in bacterial conjunctivitis:[1,8]

Pharmacological Management	
Medication	**Directions**
Ciprofloxacin 0.3% ophthalmic drops	1-2 drops into affected eye(s) **four** times daily for 5-7 days
Ciprofloxacin 0.3% ophthalmic ointment	½ inch ribbon into affected eye(s) **three** times daily for 7 days
Ofloxacin 0.3% ophthalmic drops	1-2 drops into affected eye(s) **four** times daily for 7 days
Moxifloxacin 0.5% ophthalmic drops	1 drop into affected eye(s) **three** times daily for 7 days
Azithromycin 1% ophthalmic drops	1 drop **twice** daily for 2 days; then 1 drop **daily** for 5 days
Erthromycin 5mg/gm ophthalmic ointment	½ inch ribbon into affected eye(s) **four** times daily for 7 days
Tobramycin 0.3% ophthalmic ointment	1 drop into affected eye(s) **three** times daily for 7 days
Trimethoprim-polymyxin B 0.1%-10,000 units/mL ophth. drops	1-2 drops into affected eye(s) **four** times daily for 7 days

References:
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8.Jacobs DS, Conjunctivitis. In: Givens J, ed. *UpToDate*. Waltham, Mass.:UpToDate, 2019. Accessed July 16, 2019.

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Pharmacy Focus

In this issue:

Formulary update

Asparaginase Erwinia Chrysanthemi (Erwinaze®)

Asparaginase *erwinia chryanthemi* is a component of a multi-agent chemotherapeutic regimen for the **treatment of patients with acute lymphoblastic leukemia (ALL)** who have developed hypersensitivity to *E. coli*-derived asparaginase. This medication is **restricted for use at Luckow Pavilion** only.

Cefdinir (Omnicef®)

Cefdinir is a **third generation cephalosporin** available as both oral suspension and capsule. It is an approved formulary addition for adults and pediatrics age 6 months and older. Cefdinir is in addition to the current formulary oral third generation cephalosporin, cefixime (Suprax®).

Cemiplimab-rwlc (Libtayo®)

Cemiplimab-rwlc is a programmed death receptor-1 (PD-1) blocking antibody indicated for the **treatment of patients with metastatic cutaneous squamous cell carcinoma (CSCC) or locally advanced CSCC** who are not candidates for curative surgery or curative radiation. The recommended dosing is 350 mg flat dose in 250 mL 0.9% sodium chloride IVPB with a 0.2 micron in-line filter over 30 minutes every 3 weeks until progression of disease or unacceptable toxicity. Immunotherapy is associated with autoimmune mediated adverse events. Cemiplimab-rwlc is **restricted for use at Luckow Pavilion only**.

Norgestimate 0.25 mg/ethinyl estradiol 0.035 mg monophasic oral contraceptive (Sprintec®; Orthocyclen®)

This medication is added to formulary for off-label use to **treat abnormal uterine bleeding** that is not severe enough to require intravenous estrogen therapy, as supported by ACOG guidelines.

Pravastatin (Pravachol®)

Pravastatin is an **oral HMG-CoA reductase inhibitor (statin)** indicated for the primary prevention of cardiovascular disease in patients without clinically evident coronary heart disease, secondary prevention of cardiovascular disease in patients with clinically evident coronary heart disease, or treatment of hyperlipidemia. Pravastatin is contraindicated in patients who are pregnant, breastfeeding, have active liver disease, unexplained persistent elevations of serum transaminases, or have had a hypersensitivity reaction to any component of pravastatin. Due to an increased risk of myopathy/rhabdomyolysis, the manufacturer recommends avoiding concomitant administration of pravastatin and gemfibrozil and recommends limiting pravastatin to 40mg/day in patients taking clarithromycin and 20mg/day in patients taking cyclosporine.

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Drug Info Corner

By Peter Austin, FDU PharmD Candidate 2020

Question: What is bacterial conjunctivitis and how can it be treated?

Response:

The conjunctiva is a thin, normally transparent, **membrane that runs from the inner surface of the eyelids to the edge of the cornea**.[1] When agitated, the small blood vessels within it dilate and a red color may appear, often referred to as **"pink eye."** The main purpose of conjunctiva is to protect the eye from debris and microorganisms such as bacteria. However, if a bacteria is able to proliferate within the conjunctiva it may result in inflammation and mucopurulent discharge. The most common **culprits of bacterial conjunctivitis are *Streptococcus pneumoniae, Staphylococcus aureus, Moraxella catarrhalis* and *Haemophilus influenzae.*** Other pathogens such as *Chlamydia trachomatis* and *Neisseria gonorrhoeae* are seen less commonly and require more aggressive therapy.[2]

In an outbreak study done in 2004, *Streptococcus pneumoniae* was found to be responsible for bacterial conjunctivitis at an infection rate of 1.75 persons per 100 person years at a military training facility.[3] *Streptococcus pneumoniae* was also found to be responsible for infecting up to 13.8% of students at Dartmouth College in 2002 during the winter semester.[4] According to the Centers for Disease Control and Prevention (CDC) conjunctivitis **spreads from person to person through hand-to-eye contact and direct contact with contaminated objects or large respiratory tract droplets.**[2] To reduce the risk of spreading the infection, patients are encouraged to do the following:[5]

Non-pharmacological Management	
Preventative measure	**Directions**
Pillowcases, sheets, washcloths, towels and other linens.	Wash with hot water and detergent.
Contact lenses	Stop wearing until the infection has cleared up.
Reinfection	Avoid rubbing and touching eyes; this may cause the infection to spread to the other eye.
Hygiene	Clear discharge from affected eye(s) with a clean wet washcloth several times a day; wash hands afterwards.

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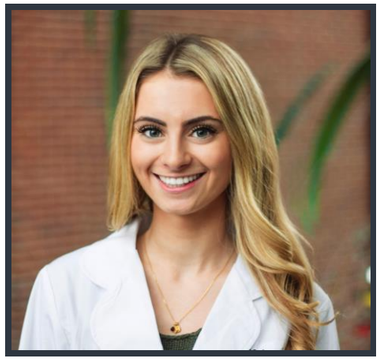
Meet the new Pharmacy Residents

The Valley Hospital Pharmacy Residency Program is nationally accredited by the American Society of Health-System Pharmacists. Upon graduation from schools of pharmacy, pharmacists may choose to further their education through a one-year long post-doctoral residency. This additional training exposes new practitioners to the different aspects of the practice of pharmacy, offers the opportunity to manage special patient populations, and allows application of knowledge and skills in participating as an interprofessional team member.

Daljit Kaur, Pharm.D., MHS
Post-Doctoral Pharmacy Practice Resident

Daljit Kaur, PharmD, MHS, earned a Doctor of Pharmacy degree and a Masters in Regulatory Science at Fairleigh Dickinson University School of Pharmacy & Health Sciences in 2019. Daljit also earned her Bachelor of Chemistry degree from Fairleigh Dickinson University Teaneck and graduated as the valedictorian of her class. She is excited to be a part of The Valley Hospital healthcare team and strives to provide the best care to all patients and advocate for the profession of pharmacy. Her areas of interest include emergency medicine, infectious diseases, and oncology. Upon completion of her residency at The Valley Hospital, Daljit envisions herself as a pharmacist working in oncology. Aside for her love for the profession of pharmacy, Daljit enjoys playing soccer, basketball, and volleyball. She also enjoys hiking, traveling, and spending time with family and friends.

Sonya Kremenchugsky, Pharm.D.
Post-Doctoral Pharmacy Practice Resident

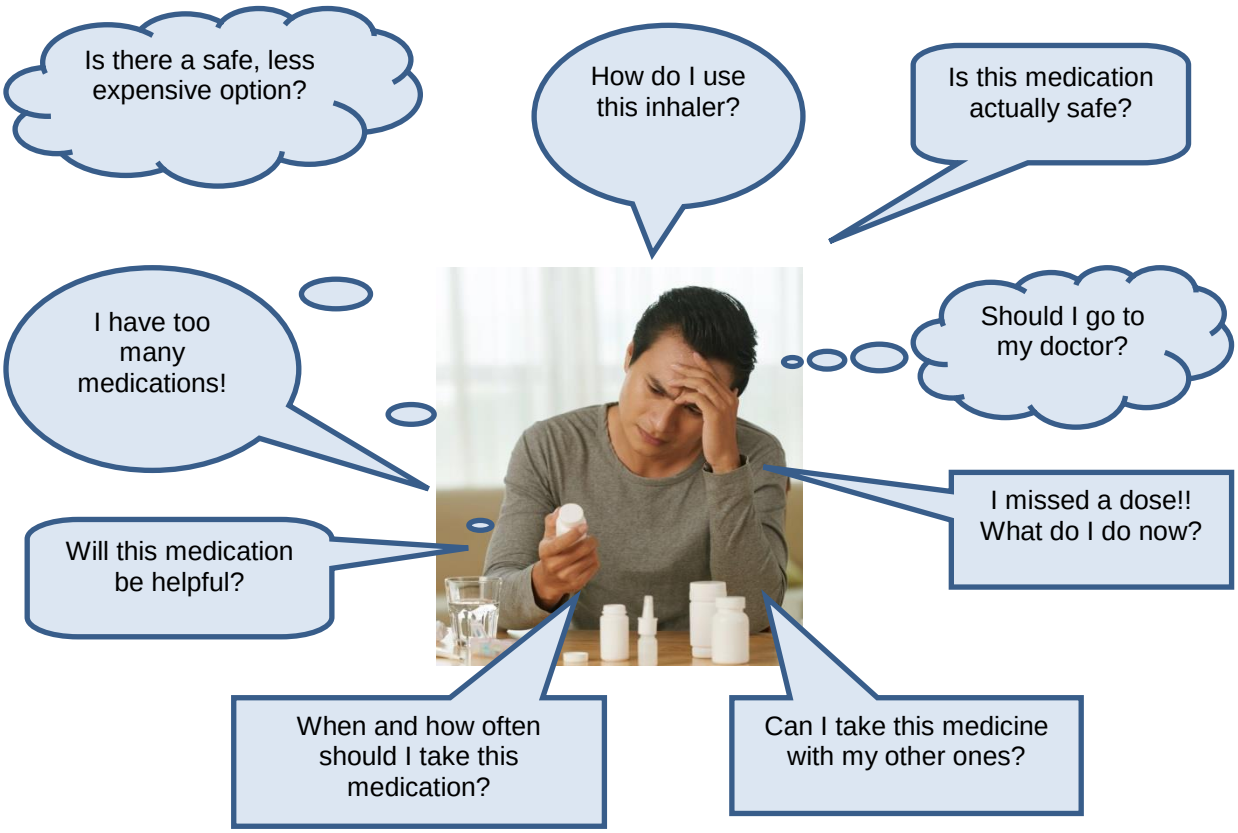


Sonya Kremenchugsky, PharmD, grew up in Glen Rock, NJ and earned a Doctor of Pharmacy degree at The University of Connecticut School of Pharmacy in May 2019. Sonya is excited to be a PGY1 pharmacy resident at The Valley Hospital where she can collaborate with members of the healthcare team to serve patients in the community. She also looks forward to further exploring her clinical interests in critical care and infectious disease during her residency. Aside from pharmacy, Sonya enjoys taking spin classes, traveling and spending time with her family and friends.

Amanda Despotovich Paladino, Pharm.D.
Post-Doctoral Community Pharmacy Resident

Amanda Despotovich (soon to change to Paladino), Pharm D, is originally from Pompton Plains, New Jersey and earned a Doctor of Pharmacy degree in May of 2019 from The Ohio State University. As a PGY1 community resident pharmacist, she is excited to be involved in bringing services to the community and being an advocate for patients. Her areas of interest are transitions of care and ambulatory care. Other than her love of pharmacy, Amanda enjoys swimming, hiking, and spending quality time with family and friends. Some exciting new things recently happened in her personal life: she was married in June in Jamaica, became a first-time Aunt, and is a proud parent of her two rescue pups, Rook, a lab/hound mix, and Garnet, a golden retriever/lab mix.

Medication Therapy Management



Get the most out of your medications by scheduling a Medication Therapy Management appointment with a Valley Health Pharmacist!

During the Appointment

- Get your questions answered about medication and general health
- Have your medications evaluated for safety and drug interactions
- Get advice on condition management, minimizing side effects and organizing your medications
- Create an action plan to improve your health

Appointment Dates and Locations

Fall 2019	
October 9	Kraft
October 23	Luckow
November 13	Valley

Appointments are 30 minutes each. This is a free service offered to Valley employees!

Schedule your appointment today by calling 201-447-8434

… continued from page 1: Formulary update

Ravulizumab-cwvz (Ultomiris®)

Ravulizumab-cwva is a **terminal complement inhibitor** that specifically binds to the complement protein C5 with high affinity. Ravulizumab-cwva is an intravenous infusion **to treat paroxysmal nocturnal hemoglobinuria (PNH).** This medication is to be infused using a 0.22 micron filter. Ravulizumab-cwva is **restricted to Luckow Pavilion**.

Romidepsin (Istodax®)

Romidepsin is a **histone deacetylase (HDAC) inhibitor** indicated to treat **cutaneous T-cell lymphoma (CTCL) and peripheral T-cell lymphoma (PTCL) in adult patients** who have received at least one prior systemic therapy. It is an intravenous infusion administered over 4 hours. Romidepsin is **restricted to Luckow Pavilion.**

Sildosin (Rapaflo®)

Sildosin is **an alpha-1 blocker** indicated for the **treatment of benign prostatic hyperplasia and uretric stones**. The other selective alpha-1 blockers on formulary is tamsulosin, however, silodosin has a faster onset of action.

Sodium zirconium cyclosilicate (Lokelma®)

Sodium zirconium cyclosilicate, abbreviated ZS-9, is indicated **for non-emergent hyperkalemia in adults.** This medication is a powder packet that is to be mixed with water and taken immediately. It is **sodium exchange potassium binder** with an onset of potassium lowering in one hour and continues for up to 48 hours. Advantages over current formulary item patiromir (Veltassa) is that ZS-9 is more appropriate for patients who lack large bowel, and has a lower risk of ischemic colitis, colonic necrosis, or gastrointestinal perforation in comparison to Kayexelate. This medication has **multiple drug interactions** and is to be separated by all other oral medications by at least two hours.

Sulfur hexafluoride lipid-type A microspheres (Lumason®)

Sulfur hexafluoride lipid-type A microsphere is indicated for use in **echocardiography for adults, ultrasonography of liver in both adults and pediatrics, and ultrasonography of the urinary tract in pediatrics**. Compared to Definity®, this medication also has a black box warning for serious cardiopulmonary reactions. However, it has many advantages such as the ability to be stored at room temperature, it does not need to be agitated in a special device prior to administration, it is less expensive , and it comes in a kit that includes all materials needed for preparation and administration (i.e. drug powder ,solution, syringe, spike).

Trastuzumab hyaluronidase (Herceptin Hylecta®)

Trastuzumab and hyaluronidase-oysk is a **combination of trastuzumab, a HER2/neureceptor antagonist, and hyaluronidase, an endoglycosidase, indicated in adults for the treatment of HER2-overexpressing breast cancer**. The recommended dosing is 600mg/10,000 units (5ml) flat dose subcutaneous over 2 to 5 minutes every 21 days. No loading dose is required or rebolusing is required. Clinical trials showed similar efficacy, safety, cost and adverse events as trastuzumab (Herceptin). Monitor patients periodically for cardiomyopathy and pulmonary toxicity. Trastuzumab and hyalruonidase-oysk is **restricted for Luckow use only**.