PROVIDENCE Tarzana Medical Center

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PHARMACY AND THERAPEUTICS NEWSLETTER

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http://www.tarzanacme.com/pharmacy_newsletter.aspx

P&T COMMITTEE ACTIONS

FORMULARY

Additions:

Ceftaroline (Teflaro®) – Antibiotic restricted to ID physicians for salvage therapy

Brentuximab (Adcetris®) – Chemotherapy agent OUTPATIENT formulary only

Deletion: Oral ketoconazole – FDA alert fatal liver toxicity (topical remains on formulary).

DRUG SHORTAGE!!

The ASHP Drug Shortage "QuickLinks" is on the front page of the hospital intranet: http://www.ashp.org/DrugShortages/Current/

Current Shortages Impacting PTMC

- Na and K Phosphate IV
- Trace Elements IV
- Diphtheria,Tetanus Toxoids, and Pertussis Vaccine (Adacel®)
- Glycopyrrolate & atropine inj

POLICY UPDATE

Anticoagulant policies updated with ACCP 2012 Guidelines

Warfarin, Heparin IV, and LMWH (Low molecular weight heparin) policies were updated to reflect the ACCP recommendation to overlap parenteral anticoagulants at least five (5) days with warfarin. This is because the INR alone may not reflect the anticoagulation effect from warfarin. The increase in INR after starting the warfarin therapy reflects factor VII depletion rather than true systemic anticoagulation. Depletion of factor II and X is a more accurate indication of warfarin's antithrombotic effect, which takes about 5 days.

Standard IV Concentration with EPIC

The PTMC IV medication concentration for multiple medications has been revised to match EPIC. The following are common EPIC critical care medication concentrations that are notably different than the existing PTMC concentrations.

MEDICATION	Current Conc.	EPIC Conc.
Dobutamine	250 mg/250 mL	500 mg/250 mL
Epinephrine	1 mg/250mL	8 mg/500mL
Lorazepam		100 mg/100mL
Midazolam		100 mg/100mL
Nicardipine (Cardene)	25 mg/250mL	50 mg/250mL
Nitroglycerine	50 mg/250mL	25mg/250mL
Phenylephrine	10 mg/250mL	100 mg/500mL
Vasopressin (Pitressin)	100 units/250mL	50 units/250mL
Vecuronium (Norcuron)	50 mg/50 mL	40 mg/100mL

C. difficile Testing – Do Not Repeat

By Debesh Das M.D. MPH, Infection Control Practitioner

Please remember that any *C. difficile* testing conducted on or after Day 4 of admission with a positive result, will be considered a Hospital Onset case of *C. difficile*, according to the National Health Safety Network (NHSN), which is a CDC database for Healthcare Associated Infection information.

Repeated C difficile testing is not a proven method to test for therapeutic efficacy, and therefore, should only be conducted in special circumstances (patients who are originally negative for *C. difficile* who become long term admissions and develop prolonged diarrhea can be checked once a week during the hospital stay).

If a patient is tested for *C. difficile* in the outpatient setting, prior to admission, please do not retest upon admission.

Antimicrobial Stewardship Providence Summit 2013

Providence system physicians, pharmacists, and Infection Control practitioners met in May 2013 to discuss system antimicrobial stewardship program (ASP) goals. The data matrix used to measure the performance of the facilities is a ratio of Days of therapy (DOT) per 1000 patient days.

The first goal is to decrease the use of unnecessary broad spectrum antibiotic coverage and/or use cost effective therapy in pneumonia, sepsis and skin & soft tissue infections by 10% year-to-year. The broad spectrum antibiotics identified are piperacillin/tazobactam (Zosyn®), meropenem (Merrem®), daptomycin (Cubicin®), linezolid (Zyvox®), and ceftaroline (Teflaro®). The second goal is to decrease the incidence of Hospital Acquired *C. difficile* infection by 10% year-to-year.

The PTMC ASP work group met subsequent to the system summit and recommended specific ways to accomplish the system goals. The Infectious Disease physicians and ASP pharmacists will review opportunities to de-escalate or discontinue broad spectrum antibiotics by targeted review at 3 days and 10 days of the therapy. The ASP will also identify and recommend administration of probiotics to high risk patients.

1. Daily, the Antimicrobial Stewardship Pharmacist will identify patients admitted from a skilled care facility, history of recurrent *C. difficile* – associated diarrhea (CDAD), or having a previous hospitalization within 30 days of admission and who are started on antibiotics. Patients who are immune-compromised or profoundly debilitated will be excluded.
2. A chart letter will be placed in the patient's medical record for the admitting/prescribing physician to consider ordering probiotics. If needed, a follow-up telephone call may be done.
3. Once approved and ordered by the physician, pharmacy will dispense *Lactobacillus acidophilus* 20 billion live culture/capsule (Florajen®) 1 capsule twice a day while the patient remains on antibiotic(s).

MEDICATION SAFETY

FDA Alerts

Many FDA safety warning are impacting the practice at the hospital. Oral ketoconazole was deleted from the formulary due to fatal liver toxicity and risk of drug interactions and adrenal gland problems. Topical ketoconazole remains on formulary as this route is not associated with the adverse events reported with the oral route.

Ticagrelor (Brilinta®) has a black box warning to use maintenance doses of aspirin less than 100mg per day. At PTMC, after loading dose of 325mg, aspirin dose is adjusted to 81mg per day by the pharmacists.

Fluroquinolones [levofloxacin (Levaquin®), ciprofloxacin (Cipro®)] have been associated with risk for possibly permanent nerve damage. The FDA recommends educating patients with the Medication Guide with every prescription and to encourage patients to contact the physician if they develpe symptoms of peripheral neuropathy.

ADVERSE DRUG REACTION (ADR)

Second Quarter Report 2013

The ADR rate for the second quarter 2013 was 3.5%, comparable to the previous quarter. The classes of medications most frequently associated with inpatient ADR's continue to be anti-diabetics and analgesics. Outpatient ADRs were most frequently associated with anticoagulants.

- Insulins (glargine, aspart, regular) were the medications reported for severity L2. The patient case is referred to the Diabetes Committee for process improvements or education.
- The incidence (N=4) and the severity (L1) of inpatient warfarin ADRs remain low. Complications from outpatient warfarin continue to be the most frequent medication related admission to the hospital. There was one intracranial hemorrhage associated with rivaroxaban (Xarelto®), a new oral anticoagulant, and was reported to the FDA.

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