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:

- **Kcentra** (4 factor PCC- Protein Complex Concentrate)
- **FEIBA** (3 factor PCC activated) – for patients with HIT (Heparin Induced Thrombocytopenia)

Both of the PCCs are restricted to reversal of anticoagulant in life-threatening bleed defined as intracranial/ spinal hemorrhage or ≥ 5 g/dL decrease in hemoglobin or > 15% decrease in hematocrit resulting in hemodynamic compromise or compression of a vital structure. Physicians are recommended to **order PCC by Trade name** to prevent medication errors (many different formulations of PCC available in the market).

Deletion:

- **Profilnine** (3 factor PCC)
- **Droperidol** – removal from PTMC stock

Update: Hydroxyethyl Starch (HES) – avoid in critically ill patients, open-heart surgery, and CT surgery per FDA black box warning 6/13/2013.
http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm358349.htm

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

- Cefazolin (Ancef®) IV
- IV Solutions: D5 1/4 NS 1L & 1/2 NS 1L, Lactated Ringer 500 mL, D5W 250 mL & 500mL, Normosol-R lL
- Ephedrine

POLICY UPDATE

EPIC Automatic Stop Date Policy

All medications prescribed for patients in hospitals require renewal per Title 22. At PTMC, 30 days is the time to renew except the ketorolac (Toradol®), which is 5 days

In EPIC, Physicians will see an icon with a clock next to the medication that needs renewal.

EPIC UPDATE

EPIC Rounding

Q: EPIC rounds doses of medications ordered by weight (e.g. IVIG, carboplatin, Lovenox®)

A: Physicians type in the exact dose and **change the unit** to mg or g instead of mg/kg or g/kg to prevent rounding by EPIC.

EPIC Exception Policy

PTMC will follow the EPIC standard except the following. Pharmacists will switch the following therapeutic interchange order-sets and protocols at order verification (PTMC PHARM Policy #2117)

Therapeutic Interchange (TI):

1. **EPIC TI Meropenem (Merrem®):** EPIC 500 mg IVPB q6h over 3 hours will be switched to PTMC 1gm IVPB q8h over 30 minutes.
2. **NG PPI: Zegerid® (omeprazole + NaBicarb)** will be switched to lansoprazole (Prevacid Solutab®) NG in doses and frequency equivalent in EPIC TI.
3. **Ciprofloxacin** will be switched to **levofloxacin.**
4. **Filgrastim (Neupogen®):** switched to tbo-filgrastim (Granix®) ONLY for FDA approved indication - non-myeloid malignancies.

EPIC Exception Policy (cont.):

Order-set

1. **Insulin Transition from IV to Subcutaneous Protocol** will be added to all Adult **Columnar Insulin IV Infusion Protocol.**
2. **DKA Adult order-set:** EPIC DKA insulin IV infusion in the order-set will be switched to Adult Columnar IV Insulin protocol. DKA Pediatric order-set will remain EPIC standard.
3. **Heparin IV Infusion Weight Based Protocol**:
   a. EPIC Cardiac + thrombolytics or GPIIb/IIIa bolus and infusion adjustment algorithm will be switched with PTMC Cardiac + thrombolytics or GPIIb/IIIa protocol.
   b. The Heparin Xa level routine daily laboratory will be unchecked.
4. **Low Molecular Weight Heparin** – Lovenox® EPIC weight based dose rounding (nearest 10mg) will be changed to PTMC weight based dose rounding (nearest 5 mg).

LMWH and Epidural Black Box Warning

The FDA recommends that health care professionals consider the timing of spinal catheter placement and removal in patients taking anticoagulant drugs (e.g. enoxaparin (Lovenox®) or rivaroxaban (Xarelto®), and delay dosing of anticoagulant medications after catheter removal to decrease the risk of spinal column bleeding and subsequent paralysis after spinal injections, including epidural procedures and lumbar punctures.

Health care professionals should determine, as part of a pre-procedure checklist, whether a patient is receiving anticoagulants and **identify the appropriate timing of dosing in relation to catheter placement or removal.**

- For Lovenox®, **placement or removal** of a spinal catheter should be **delayed for at least 12 hours** after administration of prophylactic doses. **Longer delays (24 hours)** are appropriate to consider for patients receiving higher **therapeutic doses** of enoxaparin (e.g. 1 mg/kg twice daily).
- A **post-procedure** dose of Lovenox® should usually be given no sooner than **4 hours after catheter removal.**

In EPIC, when a prescriber orders Lovenox® post procedure, a BPA (Best Practice Alert) will show in the patient screen to warn the healthcare providers that the patient has an epidural catheter in place. PTMC policy is to contact the anesthesiologist before administering Lovenox® and other anticoagulants such as dabigatran (Pradaxa), rivaroxaban (Xarelto®).

MEDICATION SAFETY

Insulin IV Infusion & Hypoglycemia Protocol

Opportunities for improvement were identified during the ongoing monitoring of the IV insulin protocol. The hypoglycemia protocol does NOT require a serum blood glucose draw after two critical finger stick blood glucose (< 40mg/dL). Nurses may administer Dextrose 50% IV or glucose gel per protocol immediately after the critical blood glucose values has been confirmed with the second finger stick.

ADVERSE DRUG REACTION (ADR) Annual Report 2013

The annual ADR rate for 2013 was 3.28% (compared to 2.5% for 2012). The classes of medications most frequently associated with inpatient ADR's remains anti-diabetic agents and analgesics and the rate is comparable to the previous year.

- The majority of ADRs for the antidiabetic agents were due to insulin glargine (Lantus®). Severe reactions are referred to Diabetes committee for identification of process improvement. Hypoglycemia protocol compliance was identified as process to improve and the reports were referred to nursing peer review.
- The inpatient and outpatient anticoagulant ADR's decreased by 55% and there were no inpatient anticoagulant ADR severity greater than L2 reported in the year 2013. The improvement could be attributed to the continued efforts of education including CME.
- The inpatient cardiovascular ADR rate decreased by 68%.

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