



Shaukat Khanum Memorial Cancer Hospital and Research Center

Pharmacy Newsletter

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The Team

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P&TC UPDATE:

New formulary drugs

- **Sofosbuvir 400mg Tablet:** Regular formulary drug
- **Urokinase 250,000 Units Injection:** Regular formulary drug (for occluded catheters and cannulas).
- **Cabergoline 0.5mg Tablet:** Restricted formulary drug (by service). Only endocrinologist will be authorized to prescribe.
- **Echocardiography Contrast (Perflutren Protein Type A Microsphere for Injection):** Restricted formulary drug (by service). Only cardiologist will be authorized to prescribe (max. two patients / month)

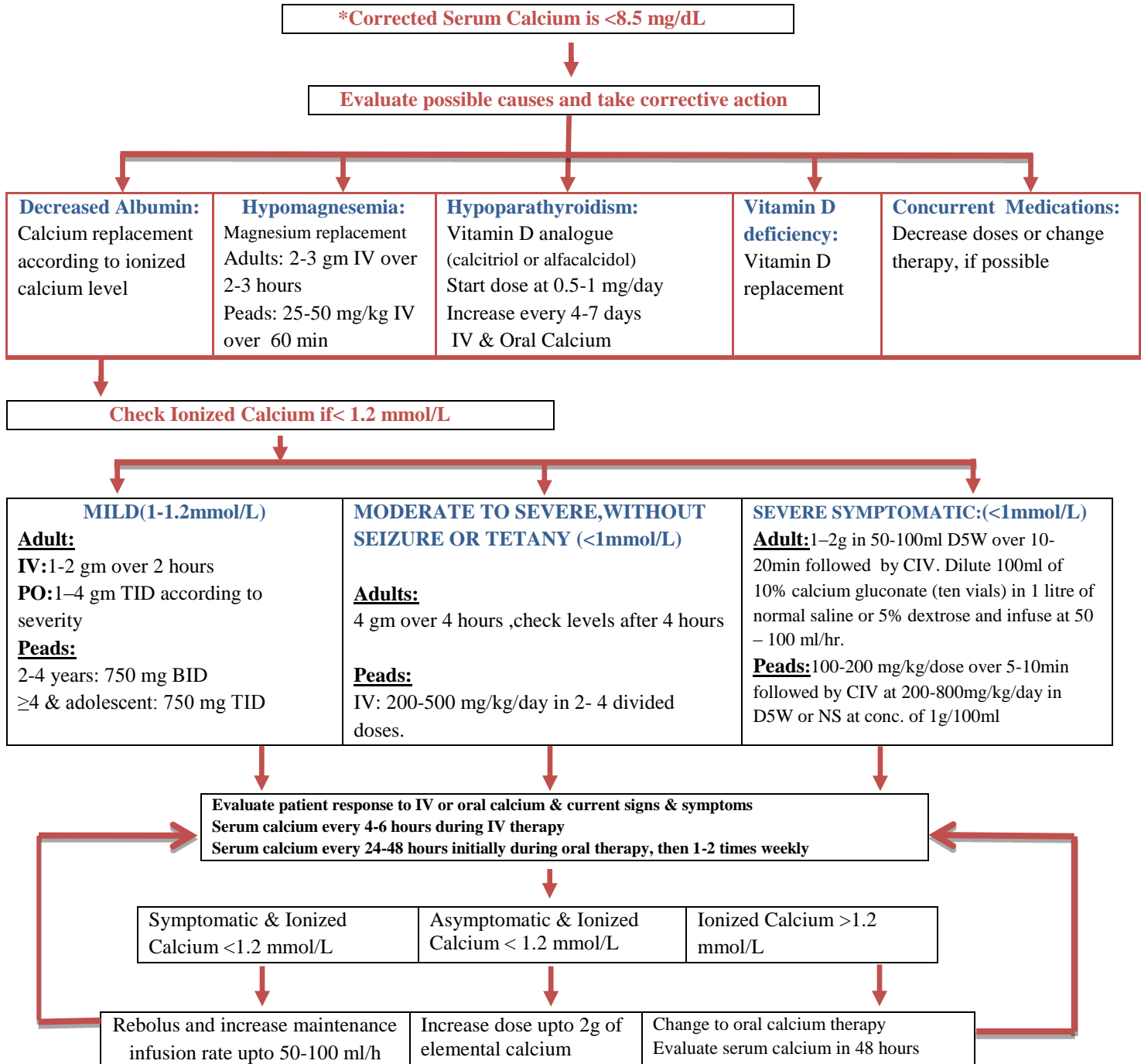
Elective Intubation Procedure

- In case an elective intubation is required, primary nurse will call for overhead.
- On-Call anesthetist will respond.
- Porter from porter's pool will get "Elective Intubation Box" from Pharmacy (Main Pharmacy or IPD IIB) to respective area.
- Elective Intubation Box will contain all drugs, which are used for Medication Crash Cart Box.

New P&TC Members:

- Dr. Aun Raza: Consultant Infectious Diseases
- Ms. Sidrah Andleeb: Sr. Pharmacist Clinical Services

MANAGEMENT OF HYPOCALCEMIA



- *Corrected calcium level = $current\ calcium + [0.8 \times (4 - albumin\ in\ g/dL)]$
- Normal Ionized calcium level: 4.2 – 5.2 mg/dL (1.15 – 1.32 mmol/L) (use one standard hospital unit only)
- Normal Serum calcium level: 8.5 – 10.5 mg/dL (2.1 – 2.6 mmol/L)
- Normal serum concentrations are not commonly used as they are prone to changes in albumin level (for every 1 gm /dL in serum albumin below 4gm/dL serum concentration decreases by 0.8 mg/dL)

Maximum Daily Replacement for Elemental Calcium is 2500 mg

Elemental Calcium Content in Different Dosage Forms			
Dosage Form	Route	Strength	Elemental Calcium
Calcium carbonate	PO	1000 mg	400 mg
Calcium acetate	PO	1000 mg	250 mg
Calcium gluconate	IV	1000 mg	93 mg
Calcium chloride	IV	1000 mg	270 mg

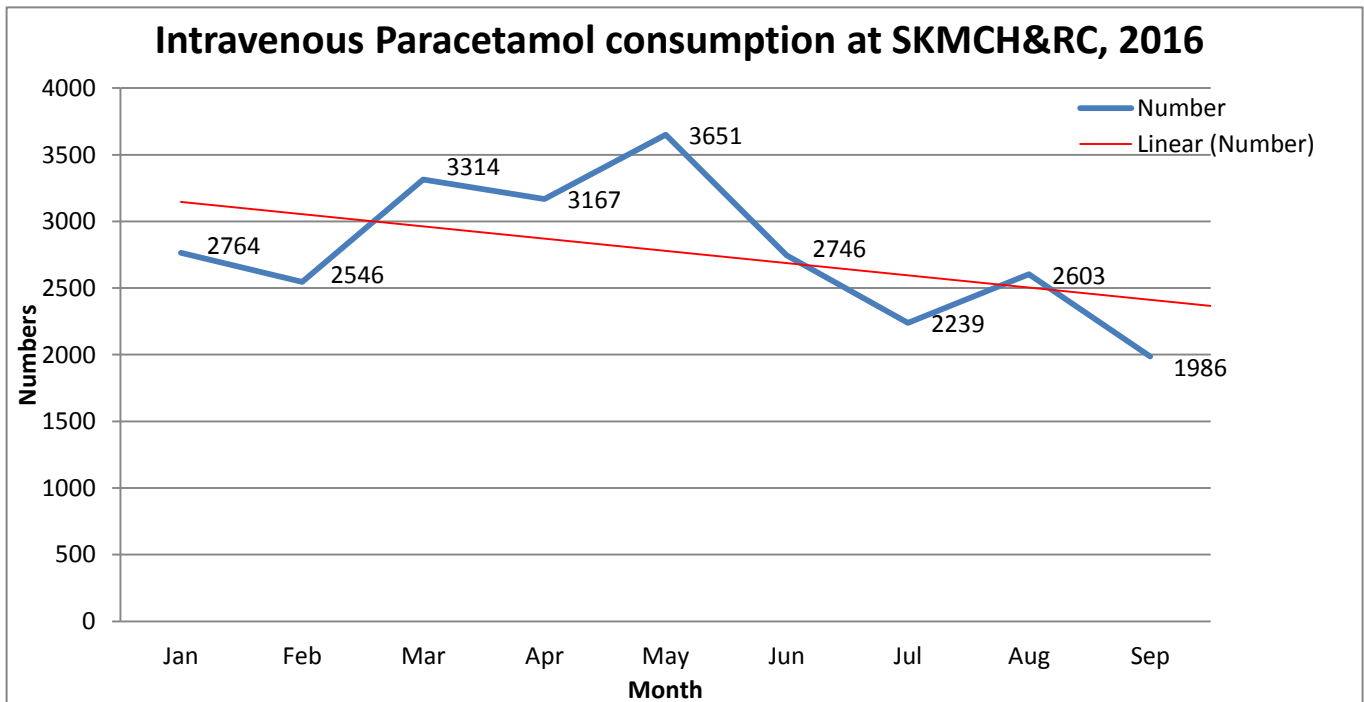
Daily Dietary Requirement of Calcium			
	Gender	Age	Elemental Calcium Need
Adults	Male	19-70 years	1000 mg
		>70 years	1200 mg
Adults	Female	19-50 years	1000 mg
		≥51 years	1200 mg
Peds	Male/Female	0-6 months	200 mg
		6-12 months	260 mg
		1-3 years	700 mg
		4-8 years	1000 mg
		9-18 years	1300 mg

Brand-wise calcium content (Available in SKMCH Pharmacy)			
Brand	Active Drug	Strength	Elemental Calcium
De Calc Tab/ Qalsan D Tab.	Calcium Carbonate	1250mg	500mg
LoPhos Tab.	Calcium Acetate	667mg	169mg
Calcium Gluconate (Wuhan) Inj	Calcium Gluconate	1000mg	93mg

REFERENCE: *Pharmacotherapy by Joseph T Dipiro, Current Medical Diagnosis & Treatment 2015, Washington Manual of Medical Therapeutics, Laxicomp Drug Reference.*

Paracetamol IV use trend at SKMCH&RC

IV to PO switch of paracetamol has shown an improvement trend in 2016 with increased number of clinical interventions and awareness discussions on cost-effectiveness of oral paracetamol therapy. MIS is currently working on on-line IV paracetamol order restriction.



News & Updates

Antibacterial Soap? You Can Skip It -- Use Plain Soap and Water

Think antibacterial soaps reduce risk of getting an infection? Not necessarily, says the U.S. Food and Drug Administration (FDA). There's no data demonstrating that over-the-counter (OTC) antibacterial soaps are better at preventing illness than washing with plain soap and water. That's why the FDA is issuing a final rule under which OTC consumer antiseptic wash products (including liquid, foam, gel hand soaps, bar soaps, and body washes) containing the majority of the antibacterial active ingredients—triclosan and triclocarban—will no longer be allowed to market.

Duration of adjuvant endocrine therapy for breast cancer

For postmenopausal women receiving adjuvant treatment with an aromatase inhibitor (AI) for hormone-positive breast cancer, the standard duration of treatment has been five years. However, data from the MA17R trial demonstrated that a longer course of treatment improves disease-free survival (DFS). Among approximately 1900 postmenopausal women who had completed four and a half to six years of therapy with an AI, treatment for an additional five years improved five-year DFS relative to those who received placebo (95 versus 91 percent). There was no difference between the groups in regards to overall survival. Bone-related toxic effects were more frequent among those receiving extended treatment. Based on these results, additional five years of treatment is recommended to those who have completed five years of AI therapy. However, it is reasonable for women with low risk of recurrence who are concerned about the risks and toxicities of extended treatment to omit extended treatment after a risk-benefit discussion.

Goss PE, Ingle JN, Pritchard KI, Robert NJ, Muss H, Gralow J, Gelmon K, Whelan T, Strasser-Weippl K, Rubin S, Sturtz K, Wolff AC, Winer E, Hudis C, Stopeck A, Beck JT, Kaur JS, Whelan K, Tu D, Parulekar WR. N Engl J Med. 2016;375(3):209

Paracetamol & Infertility

In the past half-decade or so, there have been in vitro and in vivo reports on paracetamol being associated with decreased production of testosterone and insulin like growth factor-3 (INSL 3). High levels of paracetamol in urine are observed to be associated with infertility and altered sexual behavior in men. Paracetamol at concentrations relevant to human exposure causes endocrine disturbances in the fetal testes as well. The analgesic-induced inhibition of INSL 3 may be the mechanism by which paracetamol increases the risk of cryptorchidism. Couples where man has high serum paracetamol levels are 35% less likely to conceive. Greater caution is required concerning consumption during pregnancy as taking paracetamol in pregnancy has been linked to cause infertility in developing children.

Mazaud-Guittot, Séverine, et al. "Paracetamol, aspirin, and indomethacin induce endocrine disturbances in the human fetal testis capable of interfering with testicular descent." The Journal of Clinical Endocrinology & Metabolism 98.11 (2013): E1757-E1767.