

Medication Error Bulletin

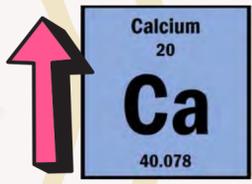
Strives to promulgate preventable medication errors amongst healthcare professionals

Brought to you by Pharmacy Department, HCTM

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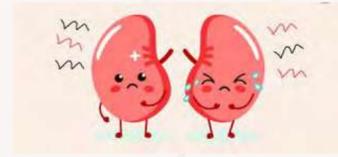
Wrong Administration - Infusion rate



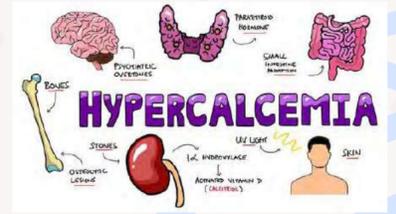
Patient is having hypercalcemia with serum calcium of 3.46mmol/l



Given IV Zoledronic Acid (Zometa) infusion over 5 minutes instead of 15 minutes



Administration of IV Zometa 4mg given as 5 minutes (< 15mins) infusion increases risk of **RENAL TOXICITY & RENAL CALCIUM RETENTION**



Calcium (2.14-2.58 mmol/L)	3.46	3.68	3.52
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Patient has Persistent hypercalcemia despite given IV Zometa



- 1) Reduction of renal toxicity & failure when IV Zometa 4 mg is given 15-minutes infusion. Hence, after 7 days, patient was redosed with IV Zometa 4mg over 15 minutes and serum calcium reduced to normalcy.
- 2) Serum creatinine has to be monitored for renal toxicity

Calcium (2.14-2.58 mmol/L)	2.78	2.55
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Wrong Administration - Drug



Patient is having hyperglycemia, DXT:10.3



Given **epidural cocktail*** 2ml/hr for 30mins instead of insulin
**EPIDURAL COCKTAIL: FENTANYL +LEVOBUPIVACAINE*



Medical staff noticed & ceased infusion



BP: 121/86mmHg
PR: 100bpm
Temp:37
SPO2: 99%



Fentanyl-induced respiratory depression triggers brain hypoxia and worsening hyperglycemia



- 1) Practice right **PATIENT, MEDICATION, DOSE, ROUTE, FREQUENCY**
- 2) Double check with another nurse, 2nd checker to sign at the witness column
- 3) Bring along prescription's record and medication to patient bedside

Wrong Drug - Contraindication



79 yo man



CKD Stage 5.
eGFR:13ml/min



T.Gliclazide 80mg BD was prescribed



After 2 days,
DXT: 1.9mmol/L



Patient was admitted for **NEUROGLYCOPENIC COMA**



- 1) Sulphonylureas (Gliclazide) should be avoided in patient with eGFR < 15ml/min
- 2) Renal failure induces multiple alterations in glucose and insulin metabolism causing hypoglycemia

Ref: KDIGO 2022, Solis E Jr, Cameron-Burr KT, Shaham Y, Kiyatkin EA. Fentanyl-Induced Brain Hypoxia Triggers Brain Hyperglycemia and Biphasic Changes in Brain Temperature. Neuropsychopharmacology. 2018 Mar;43(4):810-819. doi: 10.1038/npp.2017.181. Epub 2017 Aug 29. PMID: 28849778; PMCID: PMC5809788. Liu, J., Zheng, L., Zhang, W., Chang, K., & Pang, Y. (2013). A modified method for reducing renal injury in zoledronic Acid treatment of hypercalcemia and adverse skeletal events. Indian journal of palliative care, 19(1), 58-63. https://doi.org/10.4103/0973-1075.110239



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