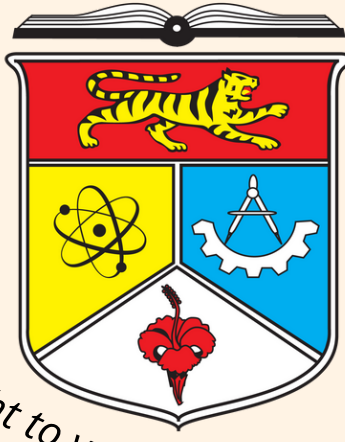


Strives to promulgate preventable medication errors amongst healthcare professionals



Brought to you by
Pharmacy Department, HCTM



Errors

Wrong Frequency



6-day old ♀ neonate diagnosed with Haematemesis with acute gastritis secondary to swallowing maternal blood

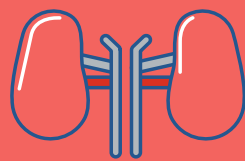
Given IV Gentamicin (cover for sepsis) intended 11.3mg **24 hourly** dosing but administered after **11 hours 15 mins**

STAT dose 18/10 @12:45 pm
2nd dose 19/10 @12 am



Consequences

TDM Gentamicin trough level: 8.1mmol/l (toxic)
Normal trough level < 4.2mmol/l



Risk of Nephrotoxicity (often reversible)



Risk of Ototoxicity bilateral vestibular damage affecting hearing & motion (often irreversible)



How do we avoid?



Recheck medication chart & cross-check dose to be given.
Contact pharmacist in charge if unsure.

Monitor Acute Kidney Injury

Oliguria <1ml/kg/hr in neonates
Monitor Serum Creatinine
Clinical Features: seizure, acute pulmonary edema



Paediatric Vestibular Evaluation

Monitor Ototoxicity

Otoacoustic Emission (Initial Screening)
At 2-3 months old, brainstem auditory evoked response (BAER) to confirm hearing loss



Wrong Formulation & Frequency

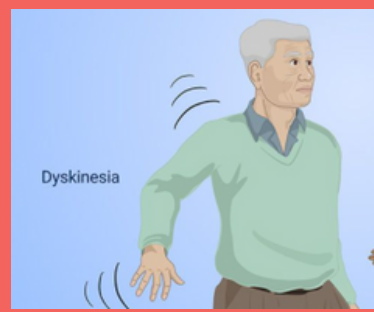


Madopar HBS
(Hemodynamically Balanced System)
Cap Levodopa 100mg + Benserazide 25mg



Madopar
Tab Levodopa 200mg + Benserazide 50mg

63yo ♂ Parkinson patient was wrongly given Madopar HBS 1 Capsule QID instead of Madopar Tablet 1 tab QID (Old Rx)



Patient developed

1. Delay to turn "on" with the first dose in the morning
2. Increase in dyskinesia accumulation of L-dopa during the day, increased risk of falls

Why?

Madopar HBS delayed onset (~3 hours) & prolonged duration (~6-8hours)

Consult pharmacist on different formulations available & do take note of the differences



Madopar
Onset: 1 hr

Suitable for patients with dysphagia, patients with delayed 'ON' phenomena, early morning rigidity
Dose : 2x - 6x daily
Minimum dose : Madopar 62.5 mg (50/12.5) BD

Suitable for patients with peak dose dyskinesia, suffering nocturnal symptoms.

NOT SUITABLE
IN PATIENT WITH RYLES TUBE
Dose : 1-2x daily

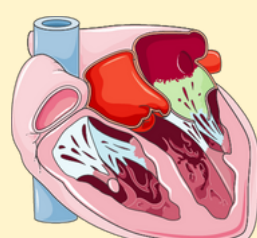


Madopar HBS
Onset: 3 hrs

Wrong Drug

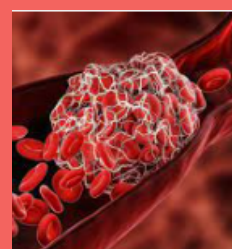


35 years old ♀
Diagnosis:
1) MSSA (Methicillin Sensitive Staph. Aureus)
2) IE (Infective Endocarditis)



Discharged with Tab Cefuroxime Axetil 250mg BD for 1 month

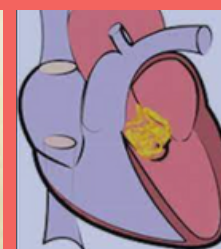
Tab Cefuroxime Axetil oral bioavailability is 37-52% and **NOT recommended** in Infective endocarditis (IE) as IE is a high inoculum infection. Hence, patient may be receiving subtherapeutic antibiotic treatment leading to IE complications such as



Blood clot



Heart failure



Abscess



Increase mortality

Due to the complexity of each case,

1. Always refer to **Infectious Disease (ID) Team**
2. Double-check with the pharmacists on the best antibiotic with best oral bioavailability in consortium with ID team



References: NAG 2019 Guidelines, Paediatric Audiology Department HCTM PPUKM, Paediatric Protocol for Malaysian Hospitals 4th Edition (2019), New Zealand Data Sheet Madopar 2021

PPUKM DRUG FORMULARY
NOW AVAILABLE ON :



Editors

Lydia Gan
lydiagan@ppukm.ukm.edu.my

Nur Ammal binti Mohd Farit
ammalfarit@ppukm.ukm.edu.my

Co Editor

Lau Chee Lan
cllau@ppukm.ukm.edu.my

PDF version of this bulletin can be found at
<https://hctm.ukm.my/farmasi/>
#TowardsZeroMed-Error

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