2024 Drug-Medication (Cardioplgia #2)

Permission to print:	Yes
Category	Drug / Medication
Category 2	cardioplegia
Severity	Good Catch No Harm Incident
Duration of incident:	minutes
Description:	Giving Del Nido cardioplegia in CABG procedure all antegrade, all pressures, flows etc were goodheart slow to arrest, noted del Nido bag had not emptied much however 750 ml given. Quick check and clamps in del nido 4 clamp bridge incorrectly set, surgeon notified whilst looking for issue. Clamps then set correctly and 1000 ml standard dose given. Full arrest attained and case proceeded.
GOOD CATCH - what went well Good catch was that perfusionist was watching the circuit, delivery lines, as well as the monitoring devices, vigilant scanning picked up the issue quickly once identified.	
What could we do bet	te Check list had been completed stating clamps (color coded) in correct position, perfusionist confident that the clamps had been checked. Clear user error. Only way to avoid this is to have a second perfusionist complete checklists.
Preventive actions	Preventative actions planned or institutedNo, current checklist adequate user error. Issue discussed with surgeon and no patient impact expected with 2-3 mins of cold blood (4) to del Nido (1)
Type of incident:	Management
Timing of incident:	CPBhypothermic
Hospital incident filed	No
Discussed with team:	Yes
Knowledge issue	No
Protocol issue	No
Rule issue	Yes
Skill issue	Yes
Team Issue	No

Patient outcome variance Nil

Commentary

This second report of wrong cardioplegia ratio in succession and likely indicates this is not uncommon given reporting systems capture a small fraction of incidents and more centres using a mix of 1:4 and 4:1 cardioplegia with increasing use of Del Nido. This report suggests "Only way to avoid this is to have a second perfusionist complete checklists" however it has no plan to adopt this as recommended in both ANZCP and AMSECT guidelines (5.1). While this might be due to perceived impracticality and likely not widely practiced if at all by perfusionists, reluctance is more likely due to unit culture. A potential solution to this particular issue may be incorporating a final check of the cardioplegia circuitry at "Time Out" confirmation of the type of cardioplegia to be used. PIRS Ed