Permission to print: Yes
Category Drug / Medication
Incident type Good Catch No Harm Incident
Duration of incident: minutes
Description: Reinfusion Hypotension rapidly after beginning reinfusion of cell salvage processed blood, post-CPB. This happened about 30 minutes post-bypass and about 25 minutes after protamine administration. We suspected unlikely to have been a protamine reaction due to the time between its occurrence and protamine delivery. MAP drop to ~49 mmHg. Lasted ~ 2 minutes before rebound with pressors to MAP in the 80's mmHg. Our current practice is: LivaNova XTRA system. Anticoagulation with ACD-A solution. Wash with 0.9% saline. Minimum wash vol of 700 mL but wash until the waste line colour indicator is green (clear fluid in waste line).
In his case the processor was used in automatic mode and we increase it to 800ml to achieve a green symbol on the systems colour line sensor. We have had several reinfusion hypotension events in the past few years, and several in a short span across last year, it appears to have increased in occurrence. Some of our anaesthetists have been vocal about seeing it occur shortly after initiating return of cell salvage blood, and with more of our perfusion team experiencing, the decision has been to change practice to using heparin in saline and see if the events continue to occur.

GOOD CATCH - what went well Communication with anaesthetic and surgical teams, prepared to wheel in new pump as required.

What could we do better Consider if a 1 L wash is a more appropriate number, a practice that the other, non-cardiac, hospital cell salvage service routinely performs

Preventive actions In the process of protocol and practice change, swapping ACD-A with 30,000 IU heparin per 1L saline as anticoagulant.

Type of incident: unknown
Hospital incident filed: No
Ext Authority Advised No
Discussed with team: Yes
Knowledge issue No
Protocol issue No
Skill issue No
Team Issue No
Patient outcome variance f Nil