

2020 Cardioplegia

Permission to print:	Yes
Incident type	Good Catch No Harm Incident
Type of incident:	Management
Category	cardioplegia
Description:	<p>Post XC period. Noticed the K had gone from 5.6 to 7. Knew exactly what had happened. The clamp applied to the crystalloid line into the cardioplegia/muf pump had come undone. I hadn't applied it well enough obviously and not noticed it ping off. Surgeon informed. As I'd been filtering there'd been no discernible increase in circuit volume, but I'd infused about 90+ mls of reperfusion crystalloid into the system. Reapplied the clamp, sent off a gas, stopped the [hemofiltration replacement solution] (as it's got K and Na in it) and increased the filtration rate. Blood gas returned a K of 8.3 and a glucose of 17 (it had been 9.6 prior to the incident- lots of cardioplegia and a very long bypass time). Fluid replacement was 0.45% Saline to stop and hypernatremia the Na was 144 on the gas. As we weren't fully warm 34C this didn't really add much bypass time, maybe 5mins to a 5hour bypass time. [I] Filtered back to a K of 6 a Glu of 12, Na stable between 141 and 146. Came off bypass and the patient went into VF as we started to MUF so back on (unrelated to incident) back on bypass for 6 minutes then a second wean resulting in 7 minutes of muffing and then back on due to poor haemodynamics. An hour of resting plus nitric and inotropic juggling resulted in a successful wean.</p>
GOOD CATCH - what went well	Standardise practice to clip off the crystalloid line above the cardioplegia crystalloid 0.2 μ filter as well as check the clamps well applied.
Preventive actions	Standardise practice to clip off the crystalloid line above the cardioplegia crystalloid 0.2 μ filter as well as check the clamps well applied.
What could we do better	Put the clamp on properly. Clipped off the crystalloid line above the cardioplegia crystalloid 0.2 μ filter also. I've done this before.
Manufacturer advised:	No
Discussed with team:	Yes
Ext Authority Advised	No
Hospital incident filed:	Yes
Knowledge issue	No
Rule issue	Yes
Skill issue	Yes
Team Issue	No
Commentary	<p>While "drug/medications" error reported to PIRS2 are infrequent, incidents related to cardioplegia, of previous reports categorised as "drug/medication" 50% have been related to cardioplegia administration. More recently these have been assigned under Category as "Cardioplegia". This would appear to be an area warranting closer attention and review of check procedures. PPIRS Ed.</p>