2024 Cardioplegia

Permission to print: Yes

Category cardioplegia

Severity Good Catch No Harm Incident

Description: On commencing administration of antegrade Derl Nido (1:4) blood cardioplegia (CSC14

CP heat exchanger with single pump 1:4 tubing - mitral repair) there was brief asystole then VF. The root pressure was low and the cross clamp was reapplied (at the perfusionist's suggestion). Cardioplegia was recommenced with asystole however despite appropriate delivery flow and pressure, it was noticed the Del Nido solution was not depleting - the bag remained full. The surgeon was advised and the occlusion was checked as OK, the flow through the cardioplegia filter confirmed (by disconnecting it) and while clear fluid (Del Nido) appeared at the 1:4 tubing connection it was not apparent that this was getting through to the cardioplegia delivery line. A blockage to the tubing was suspected and the perfusion coordinator was called to assist with changing out the cardioplegia circuit. The heart was still asystolic so some cardioplegia had got to the heart. The tubing setting was confirmed as 1:4 blood to CP in a photo of the suspected connection. The cardioplegia circuit was clamped out, the water lines disconnected, the circuit removed by the two of us and the new circuit connected expeditiously, recirculated to be air free and cardioplegia successfully administered. Subsequent inspection of the original CP circuit revealed no obstruction and so the

delivery failure remains unclear.

GOOD CATCH - what went well Early recognition of the Del Nido solution bag not depleting and the

availability of the N+1 perfusionist to facilitate a timely and safe changeout

(2nd pair of eyes.

What could we do

better

Not sure. We covered off potential causes. It was possible the Del Nido tubing was

crimped in the retaining cuff but this was not obvious.

Preventive actions Discussed with team the good catch of early observation of no change in the

cardioplegia bag volume.

Type of incident: unsure

Duration of incident: minutes

Hospital incident filed No

Ext Authority Advised No

Discussed with team: Yes

Patient outcome vari Nil