Circuit Error 2019

Permission to print: Yes
Incident type: Good Catch No Harm Incident
Category: Circuit error
Type of incident: Management
Description: Stockert S5 HLM was reconfigured in an incorrect way and I was not informed of changes to the pump before arriving for a CABG operation. A large single head roller pump had been put onto the pump in place of a double header unit that was previously in situ. The single head unit was to be used for a vent line however, the vent line only has enough pump boot to fit into a small roller pump [double header previously in place]. I needed to move the single head pump over 1 place on the HLM console and reconfigure it as the cardioplegia pump (previously a double header was used in this position to deliver 4:1 CP in the 1 small pumphead) in order to use the double header pump for vents. During the process of setting up the pump for cardioplegia use, I didn’t alter the fine calibration factor to 1.6. The cal factor for the small pump is 0.81. On delivering induction cardioplegia, there appeared to be a high line pressure generated for the corresponding flow and the flow display didn’t seem to match the revolutions of the pump. A greater than normal volume of the crystalloid was delivered from the bag. I checked with colleagues at another hospital who advised me to check the calibration factor. This was adjusted and further cardioplegia deliveries went smoothly.

GOOD CATCH - what went well
Observed that the flow / delivery and line pressure of the cardioplegia didn’t match up as well as usual. This suggested that the pump had not been configured correctly. I stopped the cardioplegia delivery early since we had good arrest and more plegia than usual had been delivered.

What could we do better
What could have been done better Notification of changes to th

Preventive actions
Communication of any changes to equipment

Hospital incident filed: No
Ext Authority Advised: No
Patient outcome variance: Nil
Discussed with team: Yes

Commentary
The report draws attention the constraints on safety to sole practitioner situations that most commonly occur in small private practice centers. The most recently published guidelines on CPB in adult cardiac surgery states: “Departments should be adequately staffed in personnel and experience [8]. The daily level of accredited perfusion staff in a department should be n + 1, where n is the number of consecutive operating rooms running. Puis L, Milojevic M, Boer C, De Somer F, Gudbjartsson T, van den Goor J, et al. 2019 EACTS/EACTA/EBCP guidelines on cardiopulmonary bypass in adult cardiac surgery. Interact Cardiovasc Thorac Surg. 2019. PIRS-2 Ed