PIRS 2016 - Circuit error

Permission to print: Yes

Incident type Near Miss

Type of incident: Management

Catagory Circuit error

Description: I set up the pump in the usual manner but put the sucker tubing into the pump

head in the wrong direction. I checked the occlusion but did not detect my mistake. Before initiating bypass the surgeon asked for the sucker to be turned on. He then complained that the sucker was blowing instead of sucking. I discovered the mistake and reinserted the pump sucker tubing in the correct orientation. I was unusually tired on the day, the only Perfusionist on duty that day and I was hurrying to setup the second case. There is no vacuum relief valve, one way valve or other indicator for easily identify which way this tubing should be placed in the run way. I immediately reinserted the pump sucker

tubing into the pump in the correct orientation.

Preventive actions Some weeks prior to this incident I has discussed with the chief perfusionist the

potential hazard of having unmarked sucker and vent tubing. We had drawn up and submitted changes to our tubing pack by the addition of a valved vacuum relief valve on both sucker and vent tubing. We had these valves placed close to the pump for a quick visual check of tube orientation. Unfortunately these

changes had not come through at the time of the incident.

GOOD CATCH - what went The GOOD CATCH that averted a potential life threatening left heart air

embolus (reversed vent pre cross clamp) was the physical test of the vent by

the team pre CPB. While one way vaccum relief valves offer a level of

protection, the value of this manuovre (dipping the vent and running pre CPB)

as a routine is "what went well" in this case

Protocol issue No

Rule issue Yes

Skill issue Yes

Team Issue No

Violation No

Manufacturer advised: No

Discussed with team: No

Hospital incident filed: No

Ext Authority Advised No

Procedure acuity: Elective

Commentary This was a very GOOD CATCH. The value of confirming the direction of the vent

tubing (and all pump tubings) on a pre CPB checklist is an additional

consideration. Reversal of pump tubing has the potential for serious harm