Permission to print: Yes

Category Electrical / electronic

Near Miss or Accident
Type of incident:

Accident
Equipment

Knowledge Error No
Rule Error No
Skill Error No
Violation No

Description: Upon attempting to go on CPB with an S3 Heart Lung machine, the arterial pump would not propel forwards. It had power but would not turn on. The venous line was reclamped and the surgeon informed. See the corrective action plan section for the troubleshooting that occurred.

Contributing factors: The age of the equipment.

Corrective action: The venous line was re-clamped immediately. It was checked that the arterial pump's on button was on and the lid was fully down on the arterial pump. The monitoring linked to arterial pump stoppage were overridden (bubble and level). When that was unsuccessful they were turned off to see if there was a fault with the monitoring that linked to the arterial pump. The heart lung machine was switched off restarted. Assistance was called for. The perfusionist manually hand cranked the arterial pump to fill and stabilise the patient (briefly clamping the arterial line off and circulating through the recirculation line, as a precaution). Perfusionist number 2 cold restarted the pump x3. The arterial module was then changed out with the assistance of 2 additional perfusionists. The occlusions and settings were changed on the module. CPB commenced in a controlled manner. Arterial blood gases looked good and there were no further issues.

Preventative action plan: The pump module to be investigated by clinical engineering and the manufacturer. [Subsequently the fault was unable to be replicated. As a precuation the pump module was repositioned to a less critical position. Replacement of the HLM is already in process]

Manufacturer advised: Yes
Discussed with team: Yes
Ext Authority Advised No
Hospital incident filed: Yes
Patient outcome variance Mild