Oxygenator - 2017

Permission to print:	Yes
Incident type	No Harm Incident
Type of incident:	Equipment
Catagory	Oxygenator
Description:	There was an unexplained resistance across the oxygenator (Sorin Inspire 6 non- integrated) 30 minutes during bypass [using Sorin S5] a Pump error fault appeared (672 - maximum load limit is reached). The silicone replacement pump boot was distending at the pump outlet indicating severe resistance across the oxygenator. Trans menbrane pressure is not monitored. The ACT was 800 and the line pressure measured proximal to the arterial filter (20 micron) was normal and unchanged precluding coagulation throughout the circuit. Notified surgeon / anaesthetist of the problem. Called for colleagues to look into the fault / discuss the issue. Patient was at 33 degrees. Flows were dropped to 1.8-2.0 index - SvO2, MAPs and blood gases were adequately maintained Patient was haemodiluted from Hct of 0.38 to 0.26 to reduce blood viscosity. An oxygenator change-out kit and spare arterial pump were brought into the operating room as precautionary measures. Further discussed problem with the surgeon and it was decided that it's safe enough to continue bypass without changing the oxygenator as all patient parameters [SvO2, acid- base and ABGs] were within normal limits at reduced flows. With one distal anasamosis remaining if the problem exacerbated the plan on removal of the cross clamp was to further reduce flow and maintain partial CPB (heart ejecting) or to wean from CPB and complete proximals off bypass. Unexpectedly the problem was alleviated upon rewarming of the patient. The oxygenator was kept at the end of the case for further testing.
Preventive actions	As above: review and assessment of the problem with staged management plan including: peer review, for adequacy of perfusion at reduced flows, early termination of CPB and oxygenator changeout
GOOD CATCH - what went	The technology of the Stockert S5 heart lung machine to recognise the problem. Fantastic back-up by the perfusion department
Protocol issue	No
Rule issue	No
Skill issue	No
Team Issue	No
Violation	No
Manufacturer advised:	Yes
Discussed with team:	Yes
Hospital incident filed:	No
Ext Authority Advised	No
Procedure acuity:	Elective
Commentary	