

Permission to print:	Yes
Near Miss or Accident	Near Miss
Type of incident:	Equipment
Catagory	Gas Supply
Knowledge Error	Yes
Protocol issue	No
Rule Error	No
Skill Error	Yes
Team Issue	No
Violation	No
Chance Chance event:	No
Description:	The S5 HLM was pushed into OR and pre checks were done. It was noted that there was very little gas pressure measured by pinching the gas outlet by pressurizing it. [The] sweep flow at this stage was at 2.5l/min. [The] surgeon was informed and asked to hold heparinisation.
Contributing factors:	Proximity of the Connect datapad bracket to the vaporiser allowing it to unseat the vaporiser. Introduction of a new heart lung machine and reconfigured setup of HLM components.
Corrective action:	[The] 2nd perfusionist was called into OR for troubleshooting. Gas lines were disconnected on the [pendant outlets] and reconnected. Gas tubing was checked for kinks and none were noted. The sweep flow put to 8l/min but still no gas flow noted. A sechrist blender was brought into room and connected through the isoflurane blender. Still no flow was noted. [We] attempted to disconnect isoflurane. This seemed to be difficult and a problem. [We] asked anaesthetist to help disconnect [the isoflurane vaporiser from the back-bar] but this was unsuccessful. We undid the screws of isoflurane back-bar. It was at this point noted that the S5 [Connect datapad] bracket arm was tilting the vaporiser and therefore the isoflurane vaporiser was not correctly seated allowing a gas leak. The vaporiser back-bar was lowered, fastened and the vaporiser replaced. Proper gas flow was restored. [The] anaesthetist and surgeon [were] informed and heparinisation followed.
Preventative action plan:	Repositioning of the electronic blender and vaporiser to provide wide space between the components. The primary action in a loss of gas flow to be use of an oxygen cylinderwith fow meter connected directly to the gas inlet of the oxygenator while identifying the gas fow failure. Inaddition a gas flow meter has been added in the gas line distal to the vaporisor as a visual confirmation of gas flow at that point - discriminating from a gas line disconnection at the oxygenator.
Manufacturer advised:	No
Discussed with team:	Yes
Ext Authority Advised	No
Patient outcome variance f	Nil

Permission to print:	Yes
Near Miss or Accident	Accident
Type of incident:	Equipment
Category	Oxygenator
Knowledge Error	No
Protocol issue	No
Rule Error	No
Skill Error	No
Team Issue	No
Violation	No
Chance event:	No
Description:	A terumo oxygenator (CX*RX25RE) was noted to have a broken fibre. Lot number: 311574. The primed pump was circulating and HLM set up in theatre for the first case. The perfusionist noticed air entering the circuit via the arterial outlet into the arterial line when the pump was turned off. Air was being dragged into the arterial line. The incident occurred prior to CPB and the air was trapped by the arterial line filter. The oxygenator was inspected for the presence of a hair line crack in the casing . However, in the circumstance of applied positive pressure the casing did not leak. The air bubbles were being produced and entrained from the membrane fibres under negative pressure, once the pump was turned off.
Contributing factors:	A broken fibre in the membrane of the oxygenator.
Corrective action:	A new pump was primed and swapped out in theatre prior to CPB.
Preventative action plan:	The manufacturer Terumo were informed. The team were notified of the incident and advised to be vigilant of possible air entrainment prior to bypass. 1. if using a combined oxygenator/arterial filter ...would we have picked this up, as air may have just going back up the line into the table sash. 2. if an emergency bring the pump in, and run on cpb in a hurry , may also not have picked it up.
Manufacturer advised:	Yes
Discussed with team:	Yes
Ext Authority Advised	No
Patient outcome variance f	Nil