2020 Gas Supply 3

Permission to print:	Yes
Incident type	Good Catch No Harm Incident
Category	Gas Supply
Type of incident:	Management
Duration of incident:	minutes
Description:	Initiated CPB using Stockert S5

HLM with Inspire 8 oxygenator. Prior to CPB gas flow was checked at 3Lpm by primary perfusionist and trainee perfusionist observing case. Gas flow was turned on to 3Lpm following arterial cannulation and isoflurane was turned onto 1%. Of note I had to reposition the isoflurane blender prior to turning it on for visualisation purposes. Upon initiation of CPB no colour change was seen in the blood between the venous and arterial line at full flows of 2.4 CI, PO2 on Spectrum M4 was reading 0. Surgeon and anaesthetist were notified, ventilator remained on, I checked if there was gas flow at the point of gas line connection to the oxygenator and found there to be none. At that point a 2nd perfusionist was called into the room and I called for an oxygen cylinder to be brought into the room. I then re-seated the isoflurane blender and checked if there was gas flow but still none. I then began following the gas line back towards the isoflurane blender. At that point the oxygen cylinder was brought into the room without a flowmeter so I asked the anaesthetic technician to get a flowmeter. The 2nd perfusionist then entered the room and I connected my gas line directly to the oxygen resulting in immediate colour change in blood. The 2nd perfusionist looked behind the HLM and saw that the gas line had become disconnected from the isoflurane vapouriser. This was reconnected the HLM gas line. SvO2 dropped to 40 for 30 seconds during period of establishing gas connection. Loss of gas flow was approximately 3 minutes from looking at the perfusion record. Patient saturations recovered immediately and rest of the CPB run was uneventful. All other HLMs in our unit had cable ties where the gas line connects to the vapouriser except this one.

GOOD CATCH - what went well 2nd Perfusionist arriving quickly and finding the cause of gas loss

What could we do better	Weaned off CPB before trying to find the source of the loss of gas supply. Looked
	behind the HLM to directly visualise the gas line connections. Checked cable tied

Preventive actions Gas line connection has been cable tied and all other HLM gas connections have been checked that they are cable tied

Hospital incident filed:	No
Ext Authority Advised	No
Discussed with team:	No
Manufacturer advised:	No
Protocol issue	No
Rule issue	Yes
Skill issue	No
Team Issue	No