Permission to print:	Yes
Near Miss or Accident	Accident
Type of incident:	Equipment
Catagory	Gas Supply
Knowledge Error	Yes
Protocol issue	No
Rule Error	No
Skill Error	No
Team Issue	No
Violation	No
Chance Chance event:	No
Description:	Gas Flow disruption to oxygenator during early stage of bypass. Gas flow to the oxygenator had been checked once the Heart Lung Machine (HLM) had been wheeled into the Operating Room (OR) pre-Cardiopulmonary Bypass (CPB) confirming flow, by disconnecting the gas line from the Oxygenator and holding up to cheek and gently squeezing the outlet listening to and feeling thegas flow, then reconnecting the FGF tube to the oxygenator. Initiation of bypass occurred with FGF 2.5L/min FiO2 65%. CPB was confirmed OK to surgeon an Anaesthesia and Isoflurane turned on to 1%. CPB flow 5L/min flow Ven Sats 83%, Art and venous limes visually inspected. As CPB progressed the arterial line was noted to be not as bright coloured as expected, but still brighter in colour than the venous line - Venous Saturation in the 80% still and blender FGF 2.5L/min with Fio2 65%. FiO2 was increased to 70% as a precaution. I was still not satisfied with the colour of the arterial line and concerned of inadequate oxygenation. I visually checked the oxygen and air connection to the boom and the gas tubing to and from the electronic blender and to and from the vaporiser, along the back bar to the oxygenator, looking for kinks in the tubing or any disconnection. The gas line was momentarily disconnected from oxygenator to check for flow - minimal to zero flow was sensed when raised to my cheek. I informed the surgeon and called for perfusion assistance as a precaution. A gas supply incident had occurred with the same HLM two days earlier. As a precaution I removed the Vaporizer from the circuit inspecting the o-rings and rechecked the gas flow at the oxygenator - flow was detected and the O-rings appeared OK. As the patient had not been cooled and the heart was still beating the surgeon made a decision to come off bypass to sort the issue out properly. Three Perfusionists came into the OR for assistance. I explained that I suspect the fault was with the vaporizer. The Anaesthetist said he would use a propofol infusion. I attempted to replace it back on the back bar but meet resistance due to the metal arm of a new data base monitor screen that had been a recent addition to the HLM. The remainder of the operation was performed with a propfol infusion with the vaporizer removed without further incident. The back bar and vaporizer was inspected by biomedical engineers the following day and no fault could be found.
Contributing factors:	The 'metal arm' of a new data base monitor screen that had been a recent addition to the HLM can easily be knocked and apply a decent leverage force against the vaporizer. The monitor and arm sticks out to the side of the HLM facing a very high ‘theatre staff’ traffic flow i.e. Anaesthetist, Anaesthetic Registrar, Anaesthetic techs, Surgeon, Surgical Registrar, Nurses and Perfusionist all who could easily knock this metal bar and monitor as they walk by.

Corrective action:	Faulty vaporizer (later out ruled)- removed from circuit. Faulty back bar - later out ruled.
Preventative action plan:	The blender and datapad were repositioned to be remote from the vaporiser
Manufacturer advised:	No
Discussed with team:	Yes
Ext Authority Advised	No
Patient outcome variance f	Nil