

Permission to print:	Yes
Category	Gas Supply
Near Miss or Accident	Near Miss
Type of incident:	Equipment
Knowledge Error	No
Rule Error	No
Skill Error	No
Violation	No

Description: After performing a full oxygenator (fx15-40) set-up, including check list including prime gas, no obvious problems were noticed. When initiating bypass, using clear prime, the arterial blood was noted to be "dark", pO₂ on inline cuvette was reading lower than usual @ 75mmHg (9.9kPa), fiO₂ 55%. The FiO₂ increased to 100%, pO₂ increased 150mmHg (19kPa). Bypass was continued, the pCO₂ was noted to be increasing via the inline Terumo CDI cuvette, sweep 1.5 l/min, pCO₂ 45mmHg > 50mmHg, this was checked using a BGA. Sweep gas increased to compensate pCO₂ was still rising - pCO₂ 55mmHg. A gas delivery problem was suspected, a leak somewhere in the system / vapouriser problem? After close inspection, the gas delivery line attached to the outlet of the anaesthetic vapouriser was found to be loose, and was just resting on the outlet coupling which was facing upwards.

Contributing factors: On inspection of the anaesthetic vapouriser, it was found to have been serviced since the heart lung machine was last used, with a new "service due date" written on the label.

Corrective action: The loose gas delivery line was pushed on firmly, and fastened using a tie band. The sweep gas and fiO₂ returned to normal settings, Blood gas sample taken to confirm correct functioning

Preventative action plan: Bio-meds instructed to place "equipment serviced" tape over the pump, with a copy of "Biomed service" attached. Extra vigilance can then be given to hardware or areas of the heart/lung machine affected. The tubing that is fixed to the vapouriser is a permanent attachment tie banded in place and as such is only physically inspected when cleaning after the case is finished. Checklist to be amended to include physical check of all gas connections.

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