Permission to print: Yes

Near Miss or Accident Near Miss

Type of incident: Equipment

Catagory Oxygenator

Knowledge Error No
Protocol issue No
Rule Error No
Skill Error No

Team Issue No

Violation No

Chance Chance event: No

Description: CAPIOX RX Oxygenator was setup and primed (Prime solution 1800mls

Plasmalyte), it is our practise to do a blood gas on the prime prior to bypass to observe if all CO2 from the setup up of circuit has been removed and that the oxygenator is transfer oxygen. With gas flow of air and oxygen 3L/min O2 @ .80

with a sechrist Blender flowed for 5min. a prime sample was drawn and analysed with a IStat machine. The result pCO2=0 (The pCO2 routinely would show all Co2 removed reading of 0mmHg) pO2 197mmhg (we would expect a prime to be above 400mmhg) The test was repeated this time the result was 210mmhg and again with the gas flow increased to 8L/min and Flo2 100 the pO2 on the IStat analysis still read 210mmhg. We elected to change out the Oxygenator prior to bypass. We did consider a fault with the I Stat cartridge so we retested it a second and third time increasing the Fio2 to 1.0 on the 3rd test with the same result of 197mmhg Po2. We did not use a different BG analyser or a cartridge from a different batch.. (we should have) However time didn't allow for further testing since we had started to question the Oxygenator and we had decided to change it out and get a new Oxygenator insitu otherwise

Surgery would be delayed.

Contributing factors: No The Hudsen O2 analyser verified the O2 delivery of O2 being delivered from

that which had been dialed up on the Sechrist Blender. The I-Stat QA had been

tested prior to use.

Corrective action: Change out the oxygenator (second Oxygenator pO2 read 546mmhg)

Preventative action plan: Test the gas transfer capability of the oxygenator prior to CPB. The Oxygenator

was being questioned possibly due to our experiences with the CAPIOX RX where we occasionally have experienced unexpected poor gas transfers during bypass this remains unexplained by company and other Perfusionist who have also experienced the phenomena, on those Oxygenators we have also tested the Oxygenator with the I Stat Analyser after we have completed the set-up and Prime but this was the first time we had such a low O2 reading during a priming of our set up. The Oxygenator was returned to the manufacturer and to date

we have not had a report to their findings

Manufacturer advised: No

Discussed with team: Yes

Ext Authority Advised Yes

Patient outcome variance f Nil