The teams were set up to do an ECMO circuit change out on a 11kg patient. The new ECMO machine was pushed in and gas lines were connected. The dial seemed to be quite difficult to turn too on the 1 L flow meter but the 10L flow meter seemed ok. I mentioned this to another perfusionist who thought it was ok. No further action was taken. Once we changed out the circuit, the blender was dialed up to 0.5l with an FiO2 of 80% on the 1L flow meter. I asked the nurse to do a blood gas within the next 10min. During this time I left the floor and returned 20min later. The blood gas showed a pCO2 of 17Kpa. I immediately increased the sweep gas on the 10L flow dial to 5 LPM. Got a spare blender from another machine for a change out. Once the replacement blender was on the ecmo machine I turned the sweep gas to 2 l and another blood gas was done. pCO2 came back at 6Kpa. The Sechrist blender was send to Biomed Engineering.

GOOD CATCH - what went well
Blood gas was done and concern was raised fast by the nursing staff.

What could we do better
On suspicion of the blender not being adequate I should have changed it at the time

Preventive actions
Propose introduction of non invasive on line blood gas monitoring for ECMO.

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