## 2020 Gas supply 2

Permission to print: Yes

Incident type Good Catch Near Miss

Type of incident: Management

Category Gas Supply

Description: Kinked Fresh Gas Tubing downstream of the Stockert S5 Electronic Gas blender causing

pressure build up in the tubing, resulting in the silicone gas tubing popping off the outlet

connector of the blender.

On setting up the heart lung machine in theatre, the blender gas flow was momentarily set at 2L/min and flow delivery checked and confirmed to the oxygenator and recorded in connect. On Arterial cannulation and connection of arterial line to the Arterial cannula the blender gas flow was set to a predetermined gas flow for the patient - after a short while, but before going on bypass, a 'gaseous pop' sound was heard from behind the heart lung machine from where the blender is located. The source of this 'pop' sound was investigated. Gas delivery lines and tubing from the boom to and from the blender was tracked and inspected and subsequently found the silicon tubing from the outlet of the blender had popped off! The silicon tubing was pushed back on and tubing further inspected downstream of this. It was subsequently found the silicone fresh gas tubing had been quite tightly cable tied to the HLM backbar and was slightly kinked. This most likely allowed pressure to build up to a point where something had to give.

GOOD CATCH - what went well

Testing the fresh gas flow delivery to the oxygenator thoroughly before going on bypass. Not ignoring but investigating the source of the never heard before popping sound.

Preventive actions

All HLMs checked for the position and fastening of silicone fresh gas flow tubing. Applying spiral cable wrap to curved sections of gas tubing. Visual measure of gas flow downstream of the Blender as close to oxygenator as possible

What could we do

better

Fresh Gas flow tubing not so restrictively cable tied to the heart lung machine frame and allowing some slack and not pulled tight and kink along its length.

Manufacturer advised: No

Discussed with team: No

Ext Authority Advised No

Hospital incident filed: No

Knowledge issue No

Rule issue Yes

Skill issue No

Team Issue No