

2019 Air in circuit

Permission to print:	No
Incident type	Good Catch Near Miss
Catagory	Air in circuit
Type of incident:	Management
Procedure acuity:	Elective
Description:	<p>The arterial cannula was inserted and de-aired. The pump was then advanced slowly to connect the arterial cannula and the arterial line. The line was checked at the connection site and no bubbles detected. The line was checked for pressure and swing then commenced RAP'ing. My habit is to watch the blood coming back down the line. A bubble was seen in the arterial line, sitting at the highest point over the patients abdomen. The surgeon likes to connect the line and the cannula on the far side of the chest [relative to the HLM] rather than above the heart. It is assumed that at some time the end of the arterial line must have been pointed downwards sufficiently for air to enter the arterial line. Once detected, the arterial line was clamped. Fluid was advanced slowly up the arterial line and the air bubble removed. We have a camera but it is usually on the radial at that time.</p>
GOOD CATCH - what went well	Observation of the line by the perfusionist during RAP'ing allowed the air to be detected. De-airing of system done without problems.
What could we do better	"more care by the surgeon"
Preventive actions	Surgeon now checking that the arterial line is maintained upwards and then the whole line checked, not just the connection point.
Manufacturer advised:	No
Hospital incident filed:	No
Ext Authority Advised	No
Patient outcome varianc	Nil
Discussed with team:	Yes
Commentary	<p>This was a fortuitous avoidance of a potentially serious air embolism unrelated to RAP (in fact the good catch was that RAP identified the air). A more formal team approach to this particular check may be indicated rather than the individual solution suggested. PIRS Ed</p>