

2026 Oxygenator fibre leak

Permission to print:	Yes
Category	Disposable Failure
Category 2	Oxygenator
Severity	Good Catch Near Miss
Description:	Eurosets Trily Pediatric oxygenator, primed on the morning of the procedure. EUROSETS REF AG5232 SN 11914704F0177. Testing occlusions, the arterial pressure was falling by 1mmHg every 2 seconds unchanged by tightening the arterial occlusions. The cardioplegia line was already clamped off. Shunts checked and clamped - continued to lose pressure at the same rate. All clamps rechecked/replaced with no improvement. Arterial boot clamped out - no change. Checked under the oxygenator for leaking, cable tied a small leak on a shunt line- no change (incidental). At this stage I called a more senior staff member for a fresh set of eyes/more ideas thinking something simple had been missed. He suggested checking the transducer and came to help. Transducer replaced - functioning well. All shunts were rechecked, they then clamped the arterial outlet isolating the oxygenator from the transducer which stopped the pressure loss. We discussed options and then he decided to pressure test the heater cooler ports again (normally done on setup) - no leak. We then checked the gas phase by inverting the oxygenator (taking it out of the holder and tipping it around 90 degrees as per attached photos show) and crystalloid poured out of the gas port. We changed the oxygenator, notified our department and the supplier, isolated the same Lot numbers from our stock.
GOOD CATCH - what went well	Paediatric case - occlusions are checked closely so a small fall in pressure was noticed. Teamwork - a fresh perspective was very helpful. The pump was primed early, and the patient was delayed so there was time for troubleshooting.
What could we do better	Isolating the oxygenator could have been done prior to changing the transducer. I'd also like to add, for changes in my own practice, our boss routinely clamps the boot post pump but pre oxygenator which would have sped up my trouble shooting and in an adult case identified a small leak that would otherwise be missed. I will be checking my occlusions much earlier from now on and clamping the boot.
Preventive actions	Supplier contacted & Team aware of the problem. Stock with the same batch number quarantined.
Type of incident:	Equipment
Manufacturer advised:	Yes
Discussed with team:	Yes
Hospital incident filed:	No
Ext Authority Advised	No
Patient outcome variance	Nil
Commentary	This was a great catch by the primary perfusionist and good support from the N +1 to help problem solve. The photo shows how significant the leak was and picking it up prior to the case starting was the best outcome. We note that the practice of isolating the oxygenator under pressure to check for a fibre leak was not uniformly practiced which underscores the value of standardising procedures. While testing for heat exchanger

water leaks is routine, testing for oxygenator fibre leak may be less common. Of interest PIRS2 has never received a report of a heat exchanger leak, however, reports of fibre leak are not uncommon, hence routine testing is warranted. PIRS Editors.

