Healthcare Innovations
How practice has changed

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SCAN ME

ECMO cannula dressing & securement practices across Australia & New Zealand

criticalcare RESEARCH GROUP

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BACKGROUND

Effective ECMO cannulae securement may reduce risk of cannula migration, dislodgement, accidental decannulation and infection, which can lead to **adverse patient outcomes**.

We conducted a **point prevalence study of dressing and securement practices** across Australia and New Zealand to document current ECMO cannulae and circuit tubing dressing and securement practices.

METHODS

Prospective, observational point prevalence study conducted in 11 ECMO centres across Australia and New Zealand over a 12-month period.

Data were collected for every ECMO patient meeting inclusion criteria during 12 pre-specified seven day data collection periods.

RESULTS

- Total of **127 patients** (adult n=100, paediatric n=27); **256 cannulae** (venous n=179, arterial n=77)
- Peripheral cannulae most commonly dressed with **transparent semi-permeable dressings** [arterial n=50 (85%); venous n=127 (77%)]. Central cannulae less uniformly dressed
- **Sutures** used at the insertion site in paediatrics (n=38, 75%) more than adults (n=88, 43%)
- Circuit tubing most frequently secured with **sutureless securement devices** [arterial n=41 (69%); venous n=84 (51%)]
- 83% of centres had a **dressing/securement guideline**
- Only 10% of insertion sites (n=13) and 5% circuit tubing (n=5) were dressed/secured **according to the guideline**

CONCLUSIONS

Dressing and securement of **peripherally-inserted ECMO cannulae is more uniform** than that of centrally-inserted cannulae.

Adherence to local guidelines is low.

Further evidence is required to inform clinical practice guidelines & improve patient outcomes.

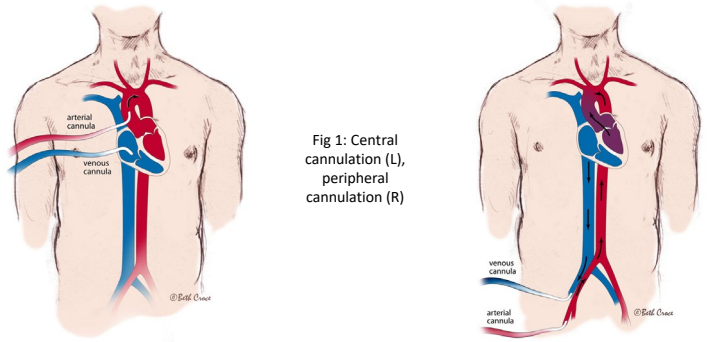

Fig 1: Central cannulation (L), peripheral cannulation (R)

Marasco et al 2008 Heart Lung Circ; doi: 10.1016/j.hlc.2002.08.009

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