2024 Electrical / Electronic (ECMO Retrieval)

Permission to print: Yes

Category Electrical / electronic

Category 2 ECMO

Severity Good Catch Near Miss

Duration of incident: hours

Description: An ECMO retrieval by aeroplane. Upon arrival in the destination ICU and opening the

Pelican cases to commence placing a patient onto ECMO, one of the four ECMO retrieval Pelican cases was very hot to touch. On opening this case, the portable Sonosite ultrasound inside the case was extremely hot to touch open, (too hot to hold a hand too close). This was also noted by one of the flight crew who was assisting with transport of the equipment into the destination ICU. The Sonosite was not used as the ICU had their own equipment available. It was decided by the flight crew that the Sonosite was not to be placed inside the Pelican case on the return flight, but rather carried in in the hand. Subsequent discussion revealed that the Sonosite was

connected to the probe prior to departure by the intensivist to test functionality – a common practice. It transpires that it is very easy to leave the ultrasound machine in the on position when closing. The device is quite tightly packed in the Pelican case

accentuating overheating in this constrained space

GOOD CATCH - what went well The Sonosite did not reach ignition temperature and was sequestered for the

return flight

What could we do bette The Sonosite should have been checked to be powered off pre departure and

transported separately as hand luggage.

Preventive actions Recommendations for checking the ultrasound is powered down prior departure for

ECMO retrievals and that all devices containing lithium batteries are separately transported as "carry-on luggage" (and not stowed in the hold) has been forwarded to

the. ECMO Governance Group.

Type of incident: Management

Timing of incident: ECMO/VAD

Hospital incident filed Yes

Ext Authority Advised No

Discussed with team: Yes

Knowledge issue No

Rule issue Yes

Skill issue Yes

Team Issue No.

Patient outcome variance Nil

Commentary This is the first report of its type to PIRS. Long distance retrieval of patients on ECMO

by both fixed wing and helicopter has become more common and the risks associated with lithium containing devices, common in medical devices, presents a particular

hazard in these circumstances. PIRS Ed