

# Management of the acutely agitated patient in a remote location

A consensus statement from Australian aeromedical retrieval services

*There are no existing standard or evidence-based guidelines for this situation*

In this article, we summarise a new consensus statement from Australian aeromedical retrieval services that provides an expert opinion on the assessment and management of acutely agitated patients in remote locations. It also outlines recommendations for patients who require aeromedical evacuation to allow for inpatient medical care, high-level psychiatric care and admission, which are usually only available in regional centres and major cities. The full consensus statement is available on the Royal Flying Doctor Service website.\*

## Why this consensus statement is needed

Assessing and managing an acutely agitated patient in a remote location with limited resources requires adaptation of usual hospital-based procedures. There are no existing standard or evidence-based guidelines for this situation. Where remote locations have a health service at all, it is generally a small community health centre with limited facilities, staffed by nurses with telehealth support and a regular visiting medical practitioner. These clinics are not staffed after hours, except for emergencies. Thus, even a single presentation of a psychotic or suicidal patient places great strain on the local resources, especially if the patient requires supervision and restraint after hours. Legislative requirements of the relevant mental health act for voluntary versus involuntary treatment strategies must be honoured at all times, applying the principle of least restrictive care appropriate for the circumstances.

Thorough medical and mental health assessments, as well as careful planning and preparation of the patient, form the foundation of safety for all involved. Behavioural techniques and judicious use of pharmacological strategies aim to reduce arousal as much as possible. If the patient is to be discharged, adequate resolution of symptoms must have occurred and a support person must be available.

Aeromedical retrieval is often required, and patient and staff safety depends on an adequate preflight assessment. When patients require evacuation because they are so acutely unwell that they are deemed a risk to themselves or others, they also present a serious aviation safety risk. Safety of patients and their health care providers, including the aeromedical retrieval team, is paramount.

Agitated patients in remote locations are ideally sedated over the 12–24-hour period before evacuation. More rapid attempts at sedation may cause oversedation, necessitating airway management and support, or undersedation, whereby the patient remains too agitated for safe air travel. Multiple factors such as claustrophobia, air turbulence and nicotine withdrawal can result in unpredictable worsening of agitation. For the evacuating aeromedical team, there is often little alternative to performing rapid sedation of the patient, which is a difficult and unpredictable task. Intubation and ventilation, used frequently in the past, carry significant physical and mental health disadvantages, such as intensive care needs and delayed transfer to definitive psychiatric care.

## Main recommendations

Patient and staff safety is the primary concern. The principles of least restrictive means of restraint and reasonable care enable optimum patient safety in the management of acute agitation. Certain minimum criteria should be adopted in this situation.

## Management of acute agitation

Once reversible causes of agitation have been excluded, acute arousal should be treated with pharmacological sedation to reduce the risk of injury to all involved.

## Medical monitoring

Acute sedation carries significant risks, and minimum parameters for physiological monitoring and resuscitation equipment are proposed. Continuous electrocardiographic monitoring and pulse oximetry should be used, along with blood pressure recordings. Non-invasive capnography should be available. Oxygen supply, a suction device and basic airway equipment are mandatory items.

## Aeromedical retrieval to higher level of care

Aeromedical retrieval of acutely agitated patients with a mental health condition can be managed by expert triage, timing and patient preparation for transport. Involuntary assessment and treatment may be required. Pharmacological sedation and mechanical restraints are recommended in the event of unpredictable agitation in such a high-risk environment.

Ketamine sedation has an important and growing role among Australian aeromedical services in the care of acutely agitated patients. It is used as a second-line drug when emergency sedation is required and oral and

**Minh Le Cong**

MBBS, FRACGP, FACRRM<sup>1</sup>

**Emmeline Finn**

FACEM, MPH(AMR)<sup>2</sup>

**Cathrin S Parsch**

FACEM<sup>3</sup>

<sup>1</sup>Royal Flying Doctor Service, Mount Isa, QLD.

<sup>2</sup>CareFlight Group Queensland, Gold Coast, QLD.

<sup>3</sup>South Australian Ambulance Service MedSTAR, Adelaide, SA.

mlecong@

rfdsqld.com.au

doi: 10.5694/mja14.01162

\* The full consensus statement, *The acutely agitated patient in a remote location: assessment and management guidelines — a consensus statement by Australian aeromedical retrieval services*, is available at <http://healthprofessionals.flyingdoctor.org.au/ignitionSuite/uploads/docs/140911%20-%20Consensus%20Statement%20-%20The%20Acutely%20Agitated%20Patient%20in%20a%20remote%20locaiton.pdf>

parenteral first-line agents have not achieved adequate reduction of arousal. Given as a sedative infusion when ongoing sedation is required, it allows for safe transport and subsequent timely handover of the patient into psychiatric care.

Rarely, tracheal intubation and mechanical ventilation under general anaesthesia may be required, when first- and second-line measures have failed to safely reduce agitation for aeromedical retrieval. However, these measures significantly delay the transition into definitive care.

We caution against the use of any sedation in the intoxicated patient. Recommendations for optimal management of such patients are provided in the full consensus statement. For example, a period of observation to allow a reduction in the level of intoxication before transfer may be prudent, rather than attempted acute sedation for immediate transfer.

### Follow-up

The management of an acutely agitated patient can be a challenging experience for all involved, including the patient and his or her family. Opportunities for feedback and debrief should be provided.

### What the consensus statement introduces

The consensus statement provides detailed guidance for clinical practice, including:

- Consensus advice on best practice in formal medical and mental health assessments, management of acute agitation before aeromedical evacuation and appropriate care during the retrieval process.
- Minimum recommendations to ensure safety of staff and patients, including arousal management, monitoring and resuscitation requirements, as well as follow-up.
- Sedation guidelines that include ketamine. Ketamine sedation has been used in Australian aeromedical retrieval of acutely agitated patients for the past 7 years and has been found to be effective and safe. For selected patients, it provides a safe and useful alternative to general anaesthesia, tracheal intubation and mechanical ventilation. Guidelines for its use in sedating acutely agitated patients are provided.

**Acknowledgements:** We thank Daniel Ellis, Mike Hill, Richard Johnson, Stephen Langford, John Setchell, and remote area psychiatrists Ernest Hunter, Geraldine Dyer and Bruce Gynther from the Cairns mental health service, Queensland, and Brian McKenny, Clinical Director of the Rural and Remote Mental Health Service, South Australia, for their contribution to the consensus statement.

**Competing interests:** No relevant disclosures.

**Provenance:** Not commissioned; not externally peer reviewed. ■