Guideline

Ministry of Health, NSW
73 Miller Street North Sydney NSW 2060
Locked Mail Bag 961 North Sydney NSW 2059
Telephone (02) 9391 9000 Fax (02) 9391 9101
http://www.health.nsw.gov.au/policies/

Management of patients with Acute Severe Behavioural Disturbance in Emergency Departments

Document Number GL2015_007

Publication date 10-Aug-2015

Functional Sub group Clinical/ Patient Services - Critical care

Summary The purpose of this Guideline is to address the management and initial sedation requirements of patients who present to emergency departments with acute severe behavioural disturbance (ASBD). This guideline includes information for children, adolescents (children and adolescents includes those under 16 years) and adults under 65 years. Management of older persons over 65 years is not contained in this Guideline.

Author Branch System Relationships and Frameworks

Branch contact System Relationships and Frameworks

Applies to Board Governed Statutory Health Corporations, Chief Executive Governed Statutory Health Corporations, Specialty Network Governed Statutory Health Corporations, Affiliated Health Organisations, Government Medical Officers, NSW Ambulance Service, Private Hospitals and Day Procedure Centres, Public Health Units, Public Hospitals

Audience Administration, clinical staff, emergency departments, security staff

Distributed to Public Health System, Divisions of General Practice, Government Medical Officers, NSW Ambulance Service, Ministry of Health, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes

Review date 10-Aug-2020

Policy Manual Patient Matters

File No. 13/1433

Status Active

Director-General

NSW GOVERNMENT Health

GUIDELINE SUMMARY

MANAGEMENT OF PATIENTS WITH ACUTE SEVERE BEHAVIOURAL DISTURBANCE IN EMERGENCY DEPARTMENTS

PURPOSE

The purpose of this Guideline is to address the management and initial sedation requirements of patients who present to emergency departments (ED) with acute severe behavioural disturbance (ASBD). This Guideline includes information for children, adolescents (children and adolescents includes those under16 years) and adults under 65 years.

Management of older persons over 65 years is not contained in this Guideline as comprehensive management of these patients is available in other NSW Health documents (please see Section 1.1 Key Documents).

KEY PRINCIPLES

The focus for this Guideline is patients, both adult and paediatric, who are unable to have a medical assessment completed due to the ASBD and may require the administration of sedation before initial assessment can occur.

This document is guided by the principles of least restrictive, collaborative, patient centred care and offers guidance on the following aspects of behavioural management and sedation:

1. Assessment of the patient with ASBD in a safe environment
2. Use of de-escalation techniques that focus on engagement of the person with ASBD to allow for assessment
3. Ensuring that legal requirements are adhered to, particularly in relation to the *Mental Health Act 2007*, the *Guardianship Act 1987*, *The Children and Young Persons (Care and Protection) Act 1998* and the clinician's duty of care to the patient
4. Sedation of the patient whose behaviour puts them or others at immediate risk of serious harm and which is unable to be contained by other means. There is also reference to physical restraint of the patient if required
5. Post sedation care of the patient including observations and documentation
6. Disposition decisions and transport of the patient from the ED to the most appropriate area for continuation of their care.

USE OF THE GUIDELINE

This Guideline supplements PD2015_004 Principles for Safe Management of Disturbed and/or Aggressive Behaviour and the Use of Restraint, however focuses on patients who present to EDs with ASBD. This is a Guideline only and the protocol is based on

available scientific evidence of drug safety profiles on sedation of acute behaviour disturbance patients in the ED [1,2] and clinical advice.

This Guideline does not replace clinical judgement; the decision to proceed with emergency sedation is made on clinical grounds and is authorised by appropriately trained medical and / or nursing staff, depending on the type of intervention being ordered. Local decision making and procedures should be developed in conjunction with this Guideline and local stakeholder groups. Further detail on use of this Guideline can be found in the attached Guideline document.

REVISION HISTORY

Version	Approved by	Amendment notes
August-2015 (GL2015_007)	Deputy Secretary, System Purchasing and Performance	New guideline

ATTACHMENTS

1. Management of Patients with Acute Severe Behavioural Disturbance in Emergency Departments – Guideline.

[1] Geoffrey K. Isbister, Leonie A. Calvera, Colin B. Page, Barrie Stokes, Jenni L. Bryant, Michael A. Downes, (2010), Randomized Controlled Trial of Intramuscular Droperidol Versus Midazolam for Violence and Acute Behavioral Disturbance: The DORM Study, *Ann Emerg Med* 2010; 56(4): 392-401 (available)

[2] Leonie Calver, Colin B. Page, Michael A. Downes, Betty Chan, Frances Kinnear, Luke Wheatley, David Spain, Geoffrey Kennedy Isbister. The Safety and Effectiveness of Droperidol for Sedation of Acute Behavioral Disturbance in the Emergency Department. Annals of Emergency Medicine, 2015; DOI: 10.1016/j.annemergmed.2015.03.016

Management of Patients with Acute Severe Behavioural Disturbance in Emergency Departments

NSW GOVERNMENT Health

GUIDELINE

Issue date: August-2015

GL2015_007

CONTENTS

1 BACKGROUND

1.1 Key Documents

This document should be read in conjunction with other relevant NSW Policy and procedure documents, particularly:

- PD2015_004 Principles for Safe Management of Disturbed and /or Aggressive Behaviour and the Use of Restraint
- PD2012_035 Aggression, Seclusion & Restraint in Mental Health Facilities in NSW
- PD2015_001 Preventing and Managing Violence in the NSW Health Workplace - A Zero Tolerance Approach
- Protecting People and Property- NSW Health Policy and Standards for Security Risk Management in NSW Health Agencies
- PD2008_010 Disability - People with a Disability: Responding to Needs During Hospitalisation.
- GL2013_001 NSW Health & Ageing and Disability and Home Care (ADHC) Joint Guideline
- Management of behavioural disturbance in patients over the age of 65 years is not contained within this document. Many older persons have mild to moderate confusion and agitation that is most commonly due to delirium / dementia and uncommonly requires physical restraint and / or parenteral sedation. De-escalation and oral sedation are often all that is required. Patients under 65 years with a diagnosis of organic cognitive impairment (e.g. early onset Dementia) should also be considered as part of this group.

  The NSW Handbook - Assessment and Management of People with Behavioural and Psychological Symptoms of Dementia (BPSD) provides a comprehensive guide for clinicians to manage these patients, including options for oral sedation.

1.2 Key Definitions

Acute Severe Behavioural Disturbance	Behaviour that puts the patient or others at immediate risk of serious harm and may include threatening or aggressive behaviour, extreme distress, and serious self-harm which could cause major injury or death
De-escalation	The process of engaging the patient as an active partner in the process of assessment, treatment and recovery with the express purpose of alleviating their current distress and de-escalating their level of ASBD in order to reduce risk
Sedation	The process of reducing agitation, irritability and ASBD through administration of sedative medications for the purpose of

	assessment, treatment and restoring therapeutic alliance
Physical Restraint	The immobilisation or physical restriction of a patient by health care staff, to prevent the patient from harming themselves, endangering others or to facilitate the provision of urgent medical treatment. This Guideline is mainly focused on the use of brief manual restraint for the purpose of administration of sedation
Mental Health Act 2007	Provides a legal framework for the voluntary and involuntary care and treatment of patients with mental illness and mental disorder in line with accepted standards of care and treatment
Guardianship Act 1987	Provides a legislative framework for securing substitute decision-making where a person lacks capacity to makes decisions on their own welfare.

2 ASSESSMENT OF THE PATIENT IN A SAFE ENVIRONMENT

2.1 General Principles

The Emergency Department (ED) evaluation of the patient with Acute Severe Behavioural Disturbance (ASBD) requires an initial brief assessment aimed at determining the most likely cause of agitation and risk of injury / violence. Once the patient is calmed, a more extensive medical and psychiatric assessment should be undertaken. The objective of the initial evaluation is not a definitive diagnosis, but a differential diagnosis that informs immediate management of ASBD, so that more detailed evaluation, management and disposition are possible.

Care of the patient should ensure a coordinated and proactive approach to management. Wherever possible, take into consideration information from family, carers and other service providers directly involved in the presentation; this information can aid in diagnosis, assessment of risk, and influence management and discharge planning. Use of interpreters for the culturally and linguistically diverse patients or their family / carer should be considered at the earliest opportunity. For patients from Aboriginal and Torres Strait Islander background, consider contacting Aboriginal Liaison Officers and mental health professionals, where available, for advice and / or assistance.

Specific considerations for patients with a disability also include the identification of known disability such as intellectual disability (ID) or autism spectrum disorder (ASD), Targeted consultations with Ageing, Disability and Home Care (ADHC) where appropriate and the child development services at Sydney Children's Hospital Network regarding the support and treatment of people with disabilities, who present to ED with ASBD, is advised.

Detail should be sought on current medication plans, behaviour support plans, communication plans / aides, and sensory considerations for the patient (particularly for those diagnosed with autism).

Assessment of children and adolescents should be conducted in consultation with specialist paediatric and / or child and adolescent mental health staff wherever possible.

For children and young people with suspected ASBD secondary to substance intoxication or toxicity, contact the NSW Poisons Information Centre on 13 11 26. Refer to PD2013_007 Child Wellbeing and Child Protection Policies and Procedures, and report any Risk of Significant Harm to the Child Protection Helpline 133 627.

2.2 Maintaining Safety

Assign the appropriate triage scale as per the Australasian Triage Scale. The Mental Health Triage Tool can be used to assist triage decision making.

Safety of the patient, staff and others in the ED is the priority:

- Assess in a space where distractions are minimised and you can give full attention to the patient. This is particularly relevant for patients with ID and ASD

- Remove other patients and bystanders from the immediate vicinity, acknowledging that family and significant others may have an important role in assessment of the patient
- Consider risks in the context of the ED setting (absconding, environmental hazards)
- Ensure staff egress from the assessment area is maintained, for example by only using assessment rooms with at least two doors
- Call security if necessary and ensure they receive adequate information about the patient, the situation and their role
- The patient with ASBD should never be assessed alone and the clinician assessing the patient should have at least one other staff member in attendance
- Never approach a patient who is holding or has access to a potential weapon. Verbally de-escalate from a safe distance with the intention of encouraging the patient to place the weapon on the floor and step away to a safe distance for the team to remove the weapon
- Approach in a calm, confident manner and avoid sudden or threatening gestures
- Avoid prolonged eye contact, do not confront, corner or stand over the patient
- Seek help if you feel threatened or at risk
- The patient should be searched for potentially dangerous items at the earliest opportunity if there is a reasonable suspicion that the patient has brought such items or drugs into the facility.[1]

EDs with fewer resources need to have lower thresholds for referral and service escalation and local escalation plans / processes should be in place for all EDs. Do not attempt to manage ASBD without adequate support and resources. Where the patient continues to present a risk to public safety, or their own safety, which can not be managed within the resources available to the facility, the Police should be called.

2.3 Medical Evaluation

Behavioural disturbance can have many causes, and may or may not be related to a mental disorder. Medical disorders causing an agitated delirium are a common cause of ASBD. Therefore, both medical and psychiatric evaluation is essential.

However, a full medical assessment may need to be interrupted to address treatment of the patient's ASBD.

2.3.1 Major causes of agitation to consider

General medical condition: acute delirium, head trauma, encephalitis, meningitis, or other infection, encephalopathy (particularly from liver or renal failure), metabolic

[1] June 2013 NSW Health Manual - Protecting People and Property. NSW Health Policy and Standards for Security Risk Management in NSW Health Agencies, Chapter 14 [available]

derangement (e.g. hyponatraemia, hypocalcaemia, hypoglycemia), hypoxia, seizure (post-ictal) and behavioural and psychological symptoms of dementia (BPSD).

Intoxication / withdrawal: Alcohol, hallucinogens, stimulants (amphetamine type substances and cocaine), cannabis, synthetics, opioids, benzodiazepines or other drug toxicity.

Patients at risk of withdrawal should be managed using the Drug and Alcohol Withdrawal Clinical Practice Guidelines - NSW

Mental health conditions: Psychotic disorders, mania, agitated depression, anxiety disorders, borderline and anti-social personality disorders.

Others: developmental, psychosocial adjustment, situational crisis, impulse control disorders and pain in patients with ID.

2.3.2 More detailed medical evaluation

Once the patient is able to be further assessed, aim to identify any potential medical, psychiatric or other causes for the behaviour; also determine if they have a known mental health condition and if the current presentation is consistent with this.

3 DE-ESCALATION TECHNIQUES

The initial approach to a person with behavioural disturbance should be focused on attempts to de-escalate the behaviour through the use of specific de-escalation techniques and engagement of the person in conversation. All staff involved in this process should be trained and skilled in de-escalation.

De-escalation frequently takes the form of a verbal loop in which the clinician actively listens to the patient, finds a way to respond that agrees with or validates the patient's position, and then explains what the clinician wants the patient to do, e.g. accept medication, sit down with you, etc. The loop repeats, as the clinician listens again to the patient's response, seeking to understand the patient's point of view and to negotiate a resolution[2]

The following provides strategies that can be utilised in de-escalation:

- Approach in a calm, confident and non-threatening manner, with a non-aggressive stance with arms relaxed
- Be empathic, non-judgemental and respectful. Listen to the patient's concerns
- Introduce yourself, your role and the purpose of the discussion, lead the discussion and engage the patient (whilst other staff remain in the vicinity to offer support, it is imperative that only one staff member verbally engage the patient)

[2] Richmond J S et al "Verbal De-escalation of the Agitated Patient: Consensus Statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup." Western Journal of Emergency Medicine XIII(1): 17-25

- Emphasise your desire to help. Ask what they want and what are they worried about. Focus on the here and now, identify what is achievable, rather than declining all requests, small concessions can build trust and rapport
- Try to identify the patient's unmet needs and help them explore their fears
- Use short clear statements which do not include medical jargon. The patient may not have the capacity to process information
- Use a slow, clear and steady voice and don't raise your voice. If the patient raises their voice, pause and wait for an opening and allow the patient to vent some of their frustrations
- Courtesies such as a cup of (lukewarm) tea, sandwiches, access to a telephone (or a staff member making a phone call on their behalf) and attending to physical needs can be very helpful
- Offer a choice of Nicotine Replacement Therapy (NRT) e.g. gum / lozenges, patches or a nicotine inhaler if they request a cigarette. Avoid entering into discussions about leaving ED to have a cigarette and focus these conversations on keeping the patient within the safety of the ED
- Getting trusted relatives or staff to talk to the patient may help. If the patient persists in directing their anger or suspicion directly at the clinician, it may be appropriate for you to ask another staff member to attempt de-escalation
- Avoid potentially provocative statements such as "calm down" or "if you don't settle down ….x will happen" "you better stop that right now…or else" as this is likely to escalate their behaviour to another level in response to the perceived threat.

3.1 De-Escalation Techniques with Children and Adolescents

- All patient have the right to information in the healthcare setting, for children and young people, this is described in the Charter of the Rights of Children and Young People in Healthcare Services in Australia,
- If possible, the patient should be given the option of taking oral medication, most children / young people can be supported in agreeing to take this option.
- A non-judgemental attitude towards the behaviour of the child or adolescent is critical to gaining engagement
- Reassuring and helping parents / guardian to contain their own anxiety can assist in the management of children and young people. If it is felt that the presence of the parents / guardian / family / friends is increasing the child / adolescent's level of agitation then separating them within the department may be beneficial. Individuals who appear to calm the situation can be asked to stay
- In emotionally charged contexts adolescents and young people (up to 25 years) tend to be driven by emotion, which can result in spur of the moment behaviours, including aggressive outbursts. For information about working with young people who are using

NSW Health services see the NSW Kids and Families Youth Health Resource Kit – An Essential Guide for Workers

4 LEGAL REQUIREMENTS FOR URGENT TREATMENT OF ACUTE SEVERE BEHAVIOURAL DISTURBANCE

In the treatment of patients with ASBD, 3 pieces of legislation support clinicians in their duty of care to provide urgent treatment without the patient's consent if required for their safety or the safety of others:

1. Part 5, Section 37 of The Guardianship Act 1987 permits the treatment of a patient 16 years or over without consent where the patient is incapable of giving consent for the treatment and only where the treatment is necessary, as a matter of urgency, to save the patient's life, prevent serious damage to the patient's health or prevent the patient from suffering or continuing to suffer pain or distress. The treatment should be the least restrictive option in the circumstances. This decision should be documented in the patient's Health Care Record. Guidance on determining a patient's capacity to consent to treatment is available in the NSW Attorney General's Department Capacity Toolkit.
2. A patient may be detained under the Mental Health Act 2007 if they are deemed to be a mentally ill person or mentally disordered person and there is no other care of a less restrictive kind that is consistent with safe, effective care that is appropriate and reasonably available. Under these circumstances the patient may have necessary treatment administered under the terms of that Act.

   Where there is inconsistency between the provisions of Part 5, Section 37 of the Guardianship Act and the provisions of the Mental Health Act 2007, the provisions of the Mental Health Act 2007 prevail.
3. The Children and Young Persons (Care and Protection) Act 1998 (Clause 174) allows for the emergency treatment of a child or young person without the consent of the child / young person or parent in order to save his or her life or to prevent serious damage to his or her health.

In NSW the age of consent for medical treatment is 14 years. Below this age parents or guardians are responsible for consent for medical management. Consent for 14 and 15 year olds is a grey area and requires a judgement by the medical officer on the adolescent's capacity to understand the consequences of the proposed treatment. Young people over the age of 16 may consent independently.

Consent for emergency sedation should be sought from the child and their parent wherever possible, however as with adults, treatment can be administered to children without consent in an emergency situation or to treat a child at risk.

5 SEDATION

5.1 INDICATIONS FOR SEDATION AND PREPARATION FOR SEDATION

This Guideline aims to provide assistance to ED staff in choosing the appropriate sedative agent and route of administration – local practice, familiarity and availability of agents will also guide choice of drug and route in each case.

Patients should be offered oral medication in the first instance. Where a patient refuses oral sedation and exhibits dangerous, violent or unpredictable behaviour parenteral sedation should be considered if the patient's condition requires that they remain in ED for further assessment and / or treatment.

The aim is to achieve an appropriate and safe level of sedation quickly with sufficient medication to manage ASBD and to facilitate an accurate assessment and appropriate management of the patient's underlying condition. **The level of sedation should ensure that the patient is drowsy but rousable.** The procedure is not intended to render the patient unconscious.

Intramuscular (IM) administration of sedative agents in agitated patients is preferable as the first line of parenteral sedation; IM injection is typically more rapidly administered with less risk of needlestick injury and blood exposure than obtaining intravenous (IV) access in a patient with ASBD. If the patient already has IV access insitu, it may be quicker and safer to administer medication via the IV route rather than IM.

Please see section 5.1.1 and 5.1.2 – 1 page algorithms for the recommended pharmacology of this Guideline. Algorithms are detailed separately for adults and paediatrics.

- Sedative neuroleptic drugs, such as droperidol, have been shown to adequately sedate patients with ASBD with time to sedation similar to benzodiazepines. Sedation with droperidol is associated with fewer adverse events and less need for repeat sedation than midazolam[3]. Droperidol is equally rapidly absorbed in both the IM and IV routes, with absorption time ranging from 3-10 minutes.

[3] Geoffrey K. Isbister, Leonie A. Calvera, Colin B. Page, Barrie Stokes, Jenni L. Bryant, Michael A. Downes, (2010), Randomized Controlled Trial of Intramuscular Droperidol Versus Midazolam for Violence and Acute Behavioral Disturbance: The DORM Study, *Ann Emerg Med* 2010; 56(4): 392-401 (available)

Research Evidence[4]

An Australian study of 1009 patients investigated the frequency of QT prolongation and torsades de pointes in patients administered high dose droperidol (10mg or more), reasons often cited for not using droperidol.

13 of the 1009 patients (1.3%) had an abnormal QT; 2 of whom had pre-existing abnormal QT according to ECGs before droperidol administration, 2 were receiving methadone, 2 were receiving escitalopram and 1 was receiving amiodarone, all which are drugs associated with QT prolongation. Excluding these other reasons for QT prolongation, there were 6 patients (0.6%) with abnormal QT. There were nil cases of torsades de pointes.

- Benzodiazepines, as the single agent for pharmacological sedation, have been shown to be suboptimal in patients with ASBD. They have relatively higher rates of adverse events including under-sedation, requiring repeat dosing, and over-sedation requiring airway intervention.[5]
- There is minimal evidence base for the use of ketamine in ASBD in ED; however it is widely and effectively used in procedural sedation in the ED in both children and adults. Several studies have shown that the long held concern about 'emergence delirium' (combative, excitable behaviour, not settling with parental interaction, requiring transient physical restraint) in the recovery phase in paediatrics is rare.

Research Evidence[6]

An analysis of 745 records looking at the nature of emergency phenomenon of children who received ketamine in two Queensland Hospitals for procedural sedation showed:

- 12.5% of children cried on awakening when recovering
- 39% experienced pleasant altered perceptions
- 2.1% (*n=16*) experienced 'emergence delirium'. None required any active treatment and all except one settled within 20 minutes
- There was no evidence of an increased rate of nightmares on telephone follow up in the weeks post procedure.

Safe administration of sedation requires a coordinated team, good timing and practice.

- Once the team is assembled, roles and responsibilities should include a team leader, medical and nursing staff to administer medications, clinicians and security staff who have undergone the necessary training to physically restrain the patient

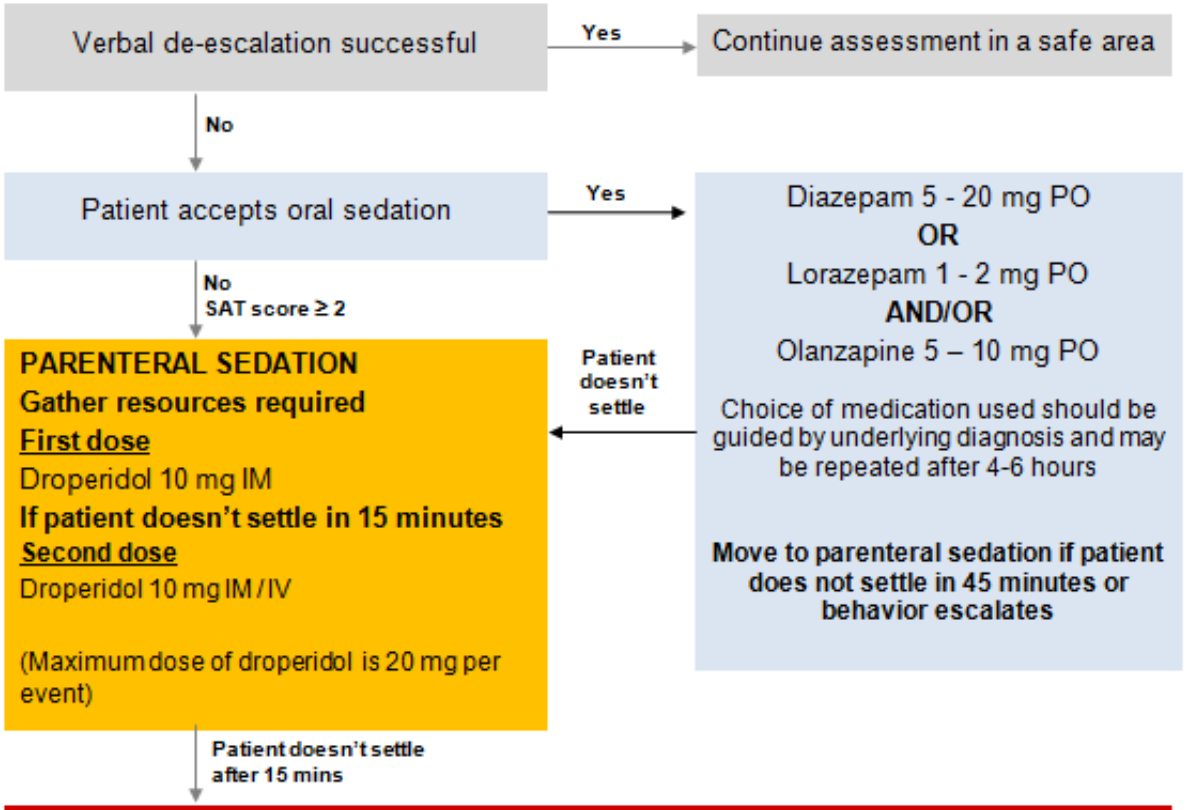
[4] Leonie Calver, Colin B. Page, Michael A. Downes, Betty Chan, Frances Kinnear, Luke Wheatley, David Spain, Geoffrey Kennedy Isbister. The Safety and Effectiveness of Droperidol for Sedation of Acute Behavioral Disturbance in the Emergency Department. Annals of Emergency Medicine, 2015; DOI: 10.1016/j.annemergmed.2015.03.016

[5] Knott JC1, Taylor DM, Castle DJ Randomized clinical trial comparing intravenous midazolam and droperidol for sedation of the acutely agitated patient in the emergency department Ann Emerg Med. 2006 Jan;47(1):61-7

[6] Greg Treston, Anthony Bell, Rob Cardwell, Gavin Fincher, Dip Chand and Geoff Cashion What is the nature of the emergence phenomenon when using intravenous or intramuscular ketamine for paediatric procedural sedation? Emergency Medicine Australasia (2009) 21, 315–322

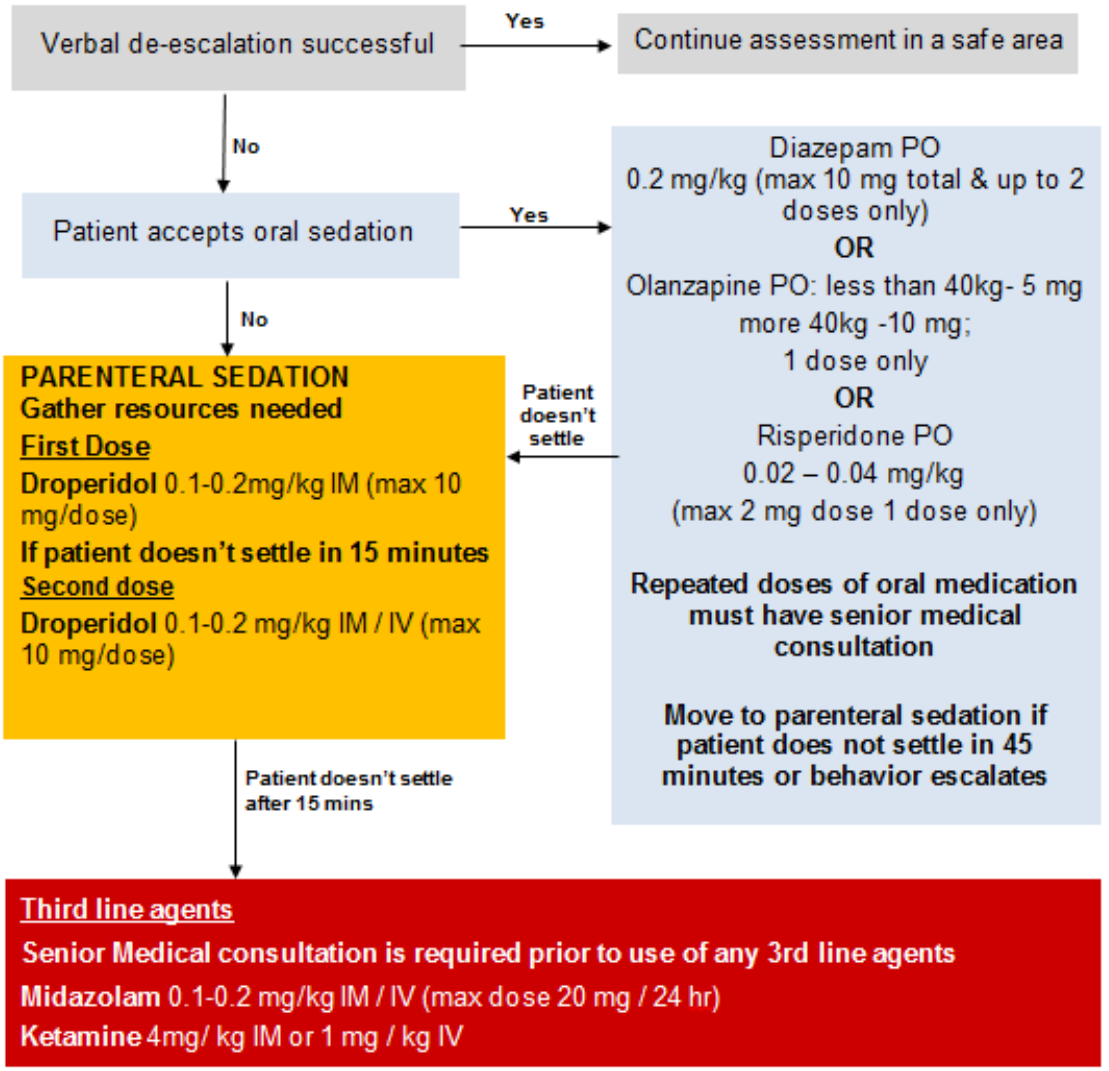
- Sedation of the patient should occur in an area where resuscitation equipment and appropriate monitoring is immediately available
- One member of clinical staff should be assigned as the person to communicate with the patient. This should be delegated to a clinician who has a good rapport with the patient where possible. It is the role of this clinician to communicate clearly with the patient throughout the sedation process, explaining what is happening and offering reassurance to the patient. The team leader should be near the head of the patient to monitor the patient's airway and physical condition
- It should be recognised that many patients with ASBD have experienced significant trauma and abuse during their lives which may increase the distress experienced during physical restraint and / or sedation. Efforts should be made to minimise this distress through clear communication and sensitivity to issues of gender and culture
- Efforts should be made to shield the patient from public view and to maintain their dignity throughout the procedure.

5.1.1 Adult (under 65 years or no diagnosis of organic cognitive impairment) sedation algorithm for patients with acute severe behavioural disturbance in the emergency department



- If intravenous access is already insitu, IV route of administration may be more appropriate
- Use five point physical restraint for sedation purposes: one on each limb & head with team leader close to patient's head monitoring airway and patient's physical condition
- **Avoid** restraining patient in a prone position as it places the patient at high risk for respiratory restriction
- Aim for Sedation Assessment Tool (SAT - see section 6.2 in Guideline) score 0 or -1 or -2
- Continuous pulse oximetry & close observation is recommended in all patients until they are able to respond to verbal stimuli. Monitor vital signs and SAT score post EACH parenteral sedation dose 5 minutely for 20 min, then every 30 min for 2 hours
- Urgent clinical review by senior medical officer if parenteral benzodiazepines are used & respiratory depression noted (e.g. SpO2 < 95%, RR < 12 or patient appears poorly perfused)
- Benztropine 1-2 mg IM / IV may be given for acute dystonic reaction.

5.1.2 Paediatric (under 16 years) sedation algorithm for patients with acute severe behavioural disturbance in the emergency department



- If intravenous access is already insitu, IV route of administration may be more appropriate
- Use lean body mass to calculate drug doses
- Use five point physical restraint for sedation purposes: one on each limb & head; with team leader close to patient's head monitoring airway and patient's physical condition
- Avoid restraining patient in a prone position as it places the patient at high risk for respiratory restriction
- Monitor vital signs and respiratory rate/effort post EACH parenteral sedation dose 5-minutely for 20 min, then every 30 min for 2 hours on the appropriate age-related Standard Paediatric Observation Chart (SPOC) or Paediatric Emergency Department Observation Chart (PEDOC)
- Watch for respiratory depression if parenteral benzodiazepines are used; treat respiratory depression from benzodiazepines with flumazenil 5-10mcg/kg (titrated to respiratory rate and effort; do NOT titrate to level of consciousness or pupil size)
- Treat acute dystonia from anti-psychotic drugs with benztropine 0.02 mg/kg IM/IV

5.2 Potential Complications of Sedation

Practitioners who administer sedation must be able to manage complications if they arise, including having the appropriate resuscitation equipment and skills. There is a wide variability in response to these agents and thus the safety margin also varies between patients. It must be remembered that if more than one agent is used, the effect is additive (both in terms of being therapeutically beneficial and side effect risk).

The practitioner must be prepared to, and able to, manage the following (for both adults and paediatrics):

- Depression of protective airway reflexes and loss of a patent airway. The risk of aspiration must be anticipated
- Depression of ventilation
- Depression of the cardiovascular system (may be due to cardiac arrhythmias with certain drugs and hypotension).

Although a thorough history and examination may not be possible, certain patients may be at higher risk of complications than others, for example, those with chronic respiratory diseases (including chronic obstructive pulmonary disease) and patients with general ill health, patients with morbid obesity and pregnant women.

Complications associated with the specific parenteral agents used in this Guideline include:

- **Droperidol**: adverse effects include hypotension, respiratory depression (especially if administered with benzodiazepines), extrapyramidal side effects (although quite rare may require benztropine 1-2 mg IV) and QT prolongation (rarely clinically significant)
- **Benzodiazepines**: respiratory depression may occur and airway and ventilatory support may be required; hypotension. Intoxicated patients (particularly with alcohol intoxication) are at higher risk of complications and respiratory depression when using benzodiazepines
- **Ketamine**: increased secretions; tachycardia; emergence hallucinations.

5.3 Physical Restraint

Physical restraint is the immobilisation or physical restriction of a patient by health care staff, to prevent the patient from harming themselves, endangering others or to facilitate the provision of essential medical treatment. This may be achieved through the use of hands-on manual restraint or the use of a mechanical restraint device (MRD).

The use of any restraint on any patient must be in accordance with the NSW Health policies which guide this document (detailed in Section 1.1). Additional documents for reference include:

- NSW Health Protecting People and Property Manual Chapter 14 ‘Role of Security Staff in NSW Health’ and Chapter 29 ‘Duress Response Arrangements’

- Mental Health for Emergency Departments – A Reference Guide also provides comprehensive guidelines in the safe use of restraint.

All staff required to use restraint are to be trained in line with NSW Health policy PD2012_008 Violence Prevention and Management Training Framework for the NSW Public Health System

Brief physical restraint is utilised as part of most episodes of acute parenteral sedation of patients with ASBD. Immobilisation of the patient through control of the limbs and head is the safest mechanism for restricting movement while medication is administered and until calming of the patient is achieved.

Use of mechanical restraint devices should only be used in extreme circumstances and only on the order of the treating doctor. The devices must be approved by the Local Health District / Specialty Health Network or Hospital Clinical Governance committee or equivalent and be applied in line with specifically approved polices and protocols.

NSW Ambulance may use mechanical restraint devices during transport. Where these restraints have been applied, local protocols, inclusive of IMIST AMBO or ISBAR handover principles, must be developed for the safe transfer of the patient onto and off the ambulance stretcher.

Each occasion of any physical restraint of a patient is to be recorded in the patient's medical record and in the ED's Restraint Register (for EDs that are declared Mental Health facilities).

6 POST SEDATION CARE OF THE PATIENT INCLUDING OBSERVATIONS AND DOCUMENTATION

Following parenteral sedation of any acutely behaviourally disturbed patient, monitoring of vital signs and level of sedation (e.g. using a sedation assessment tool see Section 6.2) is required. Continuous pulse oximetry and close observation is recommended in all patients until they are able to respond to verbal stimuli.

All clinical staff should be empowered to escalate any concerns regarding the patient (eg. abnormal vital signs, evidence of airway obstruction or respiratory depression) to the relevant medical staff at any time.

It is acknowledged that it may not be possible to continuously monitor all of the vital signs if, by doing so, safety of the staff or patient is compromised. However, in those circumstances, continuous visual observation is required to ensure patient safety.

6.1 Documentation and Reporting

Accurate and timely recording of information related to sedation of the behaviourally disturbed patient is essential and should include:

- Indication for sedation
- Medications administered
- Observations undertaken

- Adverse events.

When caring for children and adolescents, the involvement of parents / guardian should be included in the documentation. The person responsible for the child / adolescent following discharge and for follow up care should also be documented.

6.2 Sedation Scale and Use of a Sedation Assessment Tool

Some sites may choose to utilise a specific sedation assessment form to aid documentation. An example of one that may be used is attached in Appendix 1.

The level of sedation of the patient should be monitored. The Sedation Assessment Tool[7] (SAT) is a simplified version of the altered mental status score (AMSS) and is a 7-point scale assessing levels of agitation and sedation using only two descriptors:

Sedation Assessment Tool (SAT)

SCORE	RESPONSIVENESS	SPEECH
+3	Combative, violent, out of control	Continual loud outbursts
+2	Very anxious and agitated	Loud outbursts
+1	Anxious and restless	Normal / Talkative
0	Responds easily to name	Speaks Normally
-1	Asleep but rouses if name is called	Slurring or prominent slowing
-2	Physical stimulation	Few recognisable words
-3	No response to stimulation	Nil

6.3 Patient and Staff Debriefing following Sedation

The experience of sedation and / or restraint can be a distressing experience for the patient. At a time when the patient is calmer and able to engage with staff they should be offered the opportunity to discuss the incident with a skilled staff member who is able to listen to the patient's experience as well as providing feedback and rationale for the intervention. Consideration should also be given to the emotional wellbeing of other patients and/or visitors who witness such events.

If a patient is to be discharged from ED following an episode of sedation, they should be offered advice on post sedation care including the need to avoid driving and operating machinery. A patient should also be offered support numbers for Mental Health and Drug and Alcohol services where indicated.

Facilitated staff debrief following an incident of sedation and / or restraint offers a valuable opportunity for staff to express their feelings about the event as well as the opportunity to reflect on and learn from incidents to improve practice and processes.

[7] Calver, LA, Stokes, B, Isbister, GK Sedation assessment tool to score acute behavioural disturbance in the emergency department, Emerg Med Australas. 2011 Dec;23(6):732-40

7 DISPOSITION DECISIONS AND TRANSPORT

7.1 Patient Disposition

It is recognised that the ED is not the appropriate place for ongoing monitoring and definitive clinical management of sedated patients with ASBD. Such patients often require extended periods of care for definitive treatment, or before eventual safe discharge, and this ongoing care is optimally provided within an inpatient unit setting, including short-stay units.

All processes for patients departing the ED must follow PD2014_025 Departure of Emergency Department Patients.

Appropriate disposition of the post-sedation adult or paediatric patient is determined after consideration of the following factors:

- The likely underlying predominant aetiology of the behavioural disturbance (drug intoxication or withdrawal; other medical condition requiring acute management, or mental health condition) which will guide the choice of admitting specialty
- The patient's current physical status as evident by their medical condition, post-sedation monitoring of vital signs and level of sedation, which will indicate any requirement for higher level care such as HDU or ICU
- The site clinical facilities, including presence of an HDU, mental health unit, drug and alcohol service, toxicology service or inpatient specialist medical or other specialised units, which will determine the need for transfer to another site for further care.

The disposition decision must be made in conjunction with the responsible senior medical practitioner, and enacted in accordance with applicable Access Targets. Local collaboration between community services, EDs, inpatient units, police and the ambulance service will enhance the smooth transition of care between services and provide better integration of care for patients.

In the event a child or young person presents to the ED without a parent / carer and the parent / carer is unable to be contacted; or the parent/carer is stating that he/she is no longer willing to provide shelter / food / supervision for the child / young person, effective immediately, or the parent / carer is stating that they are unwilling or unable to resume care on discharge, the Health worker should refer to PD2013_007 Child Wellbeing and Child Protection Policies and Procedures.

7.2 Transport

The transfer / transport of the patient who has been sedated increases risks to the patient and potential risk to attending staff. Vigilance is required to maintain patient safety and protect attending staff. This includes the patient being transferred between departments e.g. for imaging or between facilities.

Safe transport of patients must be in accordance with NSW Health policies including

- PD2013_047 Recognition and Management of Patients who are Clinically Deteriorating
- PD2011_031 Inter-facility Transfer Process for Adults Requiring Specialist Care
- PD2010_021 Critical Care Tertiary Referral Networks & Transfer of Care (Adults)
- PD2010_030 Critical Care Tertiary Referral Networks (Paediatrics)
- PD2010_031 Children and Adolescents – Inter-Facility Transfers
- PD 2009_060 Clinical Handover – Standard Key Principles
- PD 2005_139 Transport of People Who are Mentally Ill

The following principles of safe transfer / transport of the sedated patient must be adhered to:

- The decision to transport and the transport means should be at the treating clinician's discretion, in consultation with the specialist at the referral hospital
- This decision may be done in consultation with the local Mental Health Service and NSW Ambulance where appropriate. Issues related to the patient's medical condition should be discussed with the appropriate medical / surgical team. Where issues occur which are not able to be resolved at a local level, Health Services must have in place a clear process to involve appropriate senior staff, for example, Health Services Chief Executives (CE), Health Services Director of Operations or Health Services Director of Mental Health to resolve the issue
- Transport should only occur when there is an agreed plan between the treating clinician and the receiving facility consultant for the period of transportation
- Ideally the transfer should occur during daylight hours, however this should not prevent transfer of the patient where there is an assessed need for the patient to be transferred to the referral hospital for specialist care
- The patient must be able to respond to voice. The patient at highest risk is the sedated patient with an unprotected airway. A patient with a SAT score (- 2) or (- 3) should not be transferred without airway protection
- The agitated patient requires adequate sedation for the duration of the transfer
- Where a patient is intubated as a result of sedation, the patient management falls outside the scope of this document
- If the patient's vital signs are not "Between the Flags" (please refer to relevant Adult Emergency Observation Chart or Paediatric Emergency Observation Charts for parameters) clinical review of the patient must occur prior to transport
- Provisions need to be made for nutrition, hydration, medication requirements, and pressure area care for transfers taking longer than 2 hours.

7.2.1 Escort

The sedated patient is to be escorted by a clinician with:

- The ability to recognise and respond to a patient's respiratory and cardiovascular instability
- Appropriate airway management skills
- Resuscitation equipment available
- A clear management plan for adverse events, including written sedation orders for further agitation, other medication / fluid requirements and the use of mechanical restraints
- Communication and de-escalation skills to engage the patient and keep them calm during transfer.

7.2.2 During transfer

- The patient is to be constantly observed for signs of airway obstruction, respiratory depression and hypotension. Vital signs should be undertaken to ensure frequent monitoring en route, this should be done at no more than 30 minute intervals

  The Sedation Assessment Tool (Appendix 1) score is to be monitored at maximum 30 minute intervals during transfer.

7.2.3 Restraint

Refer to Section 5.3 if physical restraint is required during transfer. Each occasion of any restraint on any patient is to be recorded in the patient's medical record and where appropriate in the ED's Restraint Register.

8 ENSURING BEST PRACTICE USE OF THIS GUIDELINE

Hospitals using this Guideline are encouraged to proactively audit patient cases to ensure best practice use of the Guideline and to ensure there are mechanisms in place for resolution of critical incidents. These mechanisms should be in line with the requirements of PD2014_004 Incident Management Policy.

A proactive audit process aimed at review of the implementation of this Guideline will assist in supporting quality assurance for patients, education of staff involved in the management of patients with ASBD in EDs, improvement of the process of management of patients presenting to EDs with ASBD and encourage collaboration between the multiple services involved in the care of these patients.

9 APPENDIX 1 – SEDATION ASSESSMENT TOOL EXAMPLE

Sedation Assessment Tool

ACUTE BEHAVIOURAL DISTURBANCE

AFFIX PATIENT IDENTIFICATION LABEL HERE

SURNAME ..... MRN .....

OTHER NAMES .....

ADDRESS .....

DATE OF BIRTH ..... AMO .....

Date: ..... /...../..... Signature_____ Initial for "Yes", N/A for "not applicable"

Preparation & Management	INITIAL
De-escalation and/or oral sedation attempted	
Mental Health consultation requested if required	
Patient requires parenteral chemical sedation and physical restraint	
Sedation Assessment Tool (SAT) +2 or +3 (see table below)	
Security and adequate resources provided and gathered	
Initial sedation with IMI Droperidol 10mg* given @.....hrs and recorded on medication chart. Subsequent sedation doses also recorded	
Vital signs monitoring commenced. 5 minutely for 20 minutes post **EACH** sedation dose then half hourly	
Medical staff contacted if observations not within the normal parameters for this patient	
IV cannula inserted if required	
Restraints checked for circulation and pressure areas as per PD2012_035 Aggression, Seclusion & Restraint in Mental Health Facilities in NSW	

Monitoring requirement	initial	5 mins	10 mins	15 mins	20 mins	Ongoing frequency depends on timing of sedation given			
Time: __ : __ hrs	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__
Sedation score (indicate score +3 to -3)									
Vital signs attended & recorded (initials)									
Additional sedation given?				Y / N	Y / N	Y / N	Y / N	Y / N	Y / N

Sedation Assessment Tool (SAT)

SCORE	RESPONSIVENESS	SPEECH
+3	Combative, violent, out of control	Continual loud outbursts
+2	Very anxious and agitated	Loud outbursts
+1	Anxious and restless	Normal / Talkative
0	Responds easily to name	Speaks Normally
-1	Asleep but rouses if name is called	Slurring or prominent slowing
-2	Physical stimulation	Few recognisable words
-3	No response to stimulation	Nil

Please use the Extra Observational Chart (page 2) for continued monitoring of vital signs if applicable

Page 1 of 2

AFFIX PATIENT IDENTIFICATION LABEL HERE

SURNAME .... MRN ....

OTHER NAMES ....

ADDRESS ....

DATE OF BIRTH .... AMO ....

Sedation Assessment Tool

ACUTE BEHAVIOURAL DISTURBANCE

Extra Observational Chart
(Time frames dependant on sedation given)

Date: .... /.........../...........

Time: __ : __ hrs	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__
Sedation score (indicate score +3 to -3)									
Vital signs attended & recorded (initial)									
Additional sedation given?	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N

Time: __ : __ hrs	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__
Sedation score (indicate score +3 to -3)									
Vital signs attended & recorded (initial)									
Additional sedation given?	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N

Time: __ : __ hrs	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__
Sedation score (indicate score +3 to -3)									
Vital signs attended & recorded (initial)									
Additional sedation given?	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N

Time: __ : __ hrs	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__	__:__
Sedation score (indicate score +3 to -3)									
Vital signs attended & recorded (initial)									
Additional sedation given?	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N