Rapid Tranquilisation Guideline in Acute Mental Health and Learning Disabilities In Patient Settings

Guideline information

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Summary of document:
This guideline has been developed to ensure a consistent and graduated approach is taken to the safe management of patients who display behaviours that challenge within acute mental health and learning disabilities settings

Scope:
This guideline provides advice to all Health Board staff in regards to the safe management of behaviour that challenge. In particular, the guideline promotes non-pharmacological methods but provides advice on pharmacological methods and subsequent monitoring required for the rapid tranquilisation (RT) of adults within acute mental health and learning disabilities settings

To be read in conjunction with:
268 - Medicines Policy (Acute, Mental Health, Learning Disabilities and Community Services) (opens in new tab)
008 - Consent to Examination or Treatment Policy (opens in new tab)
1062-Mental Capacity Act Code of Practice (opens in new tab)
176-Non-Medical Prescribing Policy (opens in new tab)
163 - Deprivation of Liberty Safeguards: Guidance and procedure for staff (opens in new tab)
NICE guideline (NG10) May 2015. Violence and aggression: short-term management in mental health and community settings. https://www.nice.org.uk/guidance/ng10 (opens in new tab)
351-Monitoring and Recording of Adult Physiological Observations and the Response to Physical Deterioration Policy (open sin new tab)

625 - Community Treatment Order Policy (opens in new tab)
285- Violence and Aggression Policy (opens in new tab)
177- Observation and Engagement Policy (opens in new tab)

Patient information:

Owning group:
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3 – full review 25.11.2025

Keywords: Rapid tranquilisation; Anticipating and reducing risk; Treatment guideline; Restrictive physical interventions

Glossary of terms

Term	Definition
PBS	Positive Behaviour Support
RT	Rapid Tranquillisation
RC	Responsible Clinician
SOAD	Second Opinion Appointed Doctor
PRN	Pro re nata (when required)
ECG	Electrocardiogram
CTO	Community Treatment Order
QTc	Corrected QT interval
U&E's	Urea and Electrolytes
NEWS	National Early Warning Score
RRPT	Reducing Restrictive Practice Team
RPI	Restrictive Physical Intervention
MCA	Mental Capacity Act
LD	Learning Disabilities
ASD	Autistic Spectrum Disorder
ADHD	Attention Deficit Hyperactivity Disorder

Contents

Introduction

This guideline gives advice to prescribers and other health care professionals on the use of non-pharmacological and following this, pharmacological methods in reducing the risk of violence or aggression occurring when patients are displaying behaviours that challenge. This guideline gives advice on the short term use of quick acting drugs, their doses and required subsequent monitoring. The use of drugs in this way is not without risks and can be distressing for patients and carers. Therefore, it is prudent to ensure that any interventions are used safely and effectively.

In the context of this document the term “behaviours that challenge” will be defined as;

“*Behaviour can be described as challenging when it is of such an* intensity*, frequency, or duration as to threaten the quality of life and/or the physical safety of the individual or others and it is likely to lead to responses that are restrictive, aversive or result in exclusion.”*

Royal College of Psychiatrists, British Psychological Society, Royal College of Speech and Language Therapists, (2007), Challenging behaviour – a unified approach.

“Behaviours that challenge” are also referred to as “behaviours of concern”. Throughout this document the phrase “behaviours that challenge” will be used

The manifestation of behaviours that challenge depends on a combination of internal factors, such as personality characteristics, distress, pain and external factors such as the physical settings, the attitudes and behaviours of surrounding staff and any other restrictions placed upon an individual. The combination of internal and external factors is non-exhaustive, and MDTs should always be working to understand the function of an individual’s behaviour. It must be remembered that fundamentally behaviour is a means of communicating a need.

The management of public order behaviour is detailed within the 285 - Violence and Aggression Policy (opens in a new tab) and should not be confused with the behaviours that challenge that are referred to in this guideline which typically are more likely to arise in the context of a variety of underlying clinical conditions.

Scope

This guideline applies to:

- Patients over 18 years of age who are admitted to adult inpatient mental health and learning disabilities settings.
- Who are severely agitated and require an intervention to quickly calm, in order to reduce the risk of imminent and serious violence to self or others.
- This guideline must be followed by all healthcare professionals involved in the care of severely agitated patients in an adult inpatient mental health and learning disabilities settings. This includes inpatient psychiatric care, emergency and urgent care. Consideration should be given to the frailty of each patient and whether it may be more appropriate to use the lower doses as stated in the older person’s algorithm.

This guideline does not encompass advice for the management of violence and physically threatening behaviour in paediatric patients. Specialist advice should be sought for an individualised management plan in this group.

Aim

The aim of this guideline is:

- To ensure a safe, consistent approach is taken to the consideration and use of pharmaceutical interventions required for the management of behaviours that challenge in mental health and learning disabilities settings. Considering what is justified, necessary and proportionate in the circumstance when decision making around the use of medication to manage behaviour. Ensuring that any action taken is the least restrictive option, whilst maintaining safety.

Objectives

The aim of this guideline will be achieved by:

- Prescribing safely within an appropriate legal framework
- Administration of an appropriate intervention when deemed necessary
- Reflection on the intervention
- Considering what is justified, necessary and proportionate in the circumstance when decision making around the use of medication to manage behaviour

The Legal Basis for Treatment

Informal Patients or patients under short terms sections and other relevant sections of the MHA to which Part IV of the Act does not apply e.g. Sec 35, 135, 136, 5 (4), 5(2), 4 etc. In emergency situations the provision of rapid tranquillisation to such patients can be authorised either by the common law doctrine of *necessity* or with reference to the defence against liability contained in sections 5/6 of the Mental Capacity Act (2005). The common law provides “a general power to take such steps as are reasonably necessary and proportionate to protect others from the immediate risk of significant harm. This applies whether or not the patient lacks the capacity to make decisions for himself” (*Munjaz v Mersey Care NHS Trust* (2003) EWCA Civ 1036 at 46). For sections 5 and 6 of the Mental Capacity Act to provide protection to care staff any restraint required must be used to “prevent harm to the person who lacks capacity” and be “a proportionate response to the likelihood and seriousness of harm” (MCA, Code of Practice (2007), para. 6.41). In an emergency situation an ‘assessment’ that the person likely lacks capacity to decline treatment and that the treatment is likely to be in their best interests will, of necessity, be an immediate appraisal rather than a detailed evaluation. Regardless of the authority used, a rapid tranquillisation event should prompt a subsequent review of the patient’s legal status.

Detained patients under a section to which Part IV of the Act applies (e.g. S2, S3, S37, S37/41, S36, S38, S47, S47/49, S48, S48/49 etc) who are within the first three months of medication as treatment for mental disorder can be treated without their consent under S63.

Detained patients under a section to which Part IV of the Act applies (e.g. S2, S3, S37, S37/41, S36, S38, S47, S47/49, S48, S48/49 etc) who are beyond the first three months of medication as treatment for mental disorder (section 58), must have a certificate – either a CO2 (patient consenting, RC completes), a CO3 (patient not consenting or lacking capacity to consent – SOAD completes) or

the treatment must be authorised under S62 (RC completes form) if it is urgent treatment and meets the criteria for the use of S62.

CTO patients are subject to Part IVA of the Act (treatment of community patients not recalled to hospital). For treatment a certificate is required one month from when the patient leaves hospital or 3 months from when the medication was first given to the patient, whichever is the latter. For those patients who have capacity and consent to their treatment a CO8 Certificate can be issued by the patients RC. For those patients who do not have capacity or do not consent to treatment their treatment must be certified by a SOAD (CO7 certificate).

CTO patients who have been recalled to hospital can be treated without consent if their CO7 (SOAD completes) authorises treatment on recall, or, if they meet the criteria for S62, that can be used as authority for urgent treatment.

CTO patients who have been revoked can be treated under S62 whilst provisions are made to comply with S58 – i.e. a CO2 or CO3 certificate.

In the event that treatment is prescribed and administered for those patients who require a certificate/ authorisation for treatment (recalled/ revoked CTO patients and patients to whom S58 applies) the form (whether it be a CO2/ CO3 or S62 form) must give authority for that particular medication to be prescribed and given.

ANTICIPATING AND REDUCING RISK

- Staff should have appropriate training in non-pharmaceutical psychosocial methods to avoid or minimise the use of restrictive interventions
- Services should have a restrictive practice intervention programme in place, including a psychologically informed framework of approaches to reduce behaviours that challenge
- Use a multidisciplinary approach to assess and manage risk of behaviours that challenge, involving service user and carer where possible, and including the completion of suitable individual risk assessment tools.
- Regularly review risk assessments and risk management plans, sharing information as appropriate
- Develop, document and regularly review an individual pharmacological strategy to reduce and manage risk

Roles and Responsibilities

Prescribers are accountable for:

- Prescribing the right drug at the right dose via the right route and under an appropriate legal framework
- Specifying minimum time between doses and the maximum dose to be administered in a 24 hour period
- Consider medication already prescribed

- Reviewing the prescription weekly
- Ensuring patients are monitored for side effects and desired effects of any medicines administered
- Documenting rationale and target symptoms treated

Nursing staff are accountable for:

- Exhausting other strategies to de-escalate the patient using primary and secondary prevention as recommended in the MHA Code of Conduct 2016 and Reducing Restrictive Practice Framework (Welsh Government 2021), as part of Person Centred Planning, before using pharmacological methods
- The safe administration of medicines which includes compliance with minimum time between doses and the maximum dose to be administered in a 24 hour period
- The selection of the right medicines at the right dose via the right route for the purpose of managing highly emotionally aroused patients presenting as a risk of violence and aggression
- Should Restrictive Physical Interventions (RPI) be required then nursing staff are responsible for the physical and psychological health monitoring during and post restraint
- Ensure medication is administered under an appropriate legal framework
- Subsequent monitoring of patients for side effects and desired effects of any medicines administered
- Notifying medics of any physical deterioration
- Debrief patients
- Debrief staff
- Document the non-pharmacological and pharmacological interventions in the patient notes to encourage specific intervention recording to inform ongoing risk management plan
- Review interventions, update person centred plans and risk management plan
- Complete a Datix

Pharmacists are accountable for:

- Ensuring the prescription for medicines for RT has the right dose, right medicine and right route
- Ensuring appropriate administration of medicines
- Ensuring appropriate subsequent monitoring of side effects and desired effects of any medicines administered
- Ensuring medication is prescribed and administered under an appropriate legal framework
- Ensuring prescriptions are reviewed weekly

Treatment Guidelines

Preventative approaches and co-production

Non-pharmacological

Extreme agitation, aggression and potentially violent behaviour, if safe to do so, should be in the first instance managed or mitigated by non-pharmacological methods deployed by skilled staff. These include the use of Person Centred Planning in the form of Person Centred Behaviour Support Plans or Positive Behaviour Support (PBS) plans, which highlight primary preventative measures, secondary preventative measures and crisis management that are individualised for each patient.

Improvement Cymru published A Framework for the use of Non Pharmaceutical Approaches to Reducing Restrictive Practices in Wales (2024) which outlines a variety of non-pharmacological approaches within Mental Health and Learning Disabilities settings.

Positive Behaviours Support (PBS) or Person Centred Support Plans can help reduce the need for the use of pharmacological interventions as they record a patient's early warning signs and triggers. They also included Primary prevention, Secondary prevention and Crisis management. The use of these approaches can reduce the risk of patient's displaying behaviours that challenge by focusing on preventative strategies and overall improvement of quality of life.

Capable Environments- Capable environments are those in which people can thrive and are less likely to utilise behaviours that challenge. There are 12 key areas to address (McGill et al 2020) these include things like having appropriate communication systems in place, having meaningful things to do, having consistent approaches to support, and having sensory needs attended to.

Other non-pharmacological tertiary options may include the following providing they are justified within an appropriate legal framework: Increased levels of observation, transfer to a psychiatric intensive care unit, the use of restrictive physical interventions or the use of seclusion/segregation.

Even when they do not prevent the need for pharmacological treatment, such strategies may be important in maintaining the safety of the person and/or others.

It is also important to ensure that any developing situation or positive intervention takes into account the individual needs of patients related to:

- Sensory impairment
- Black and minority ethnic patients
- Language, cultural and religious needs and the research that exists that shows black minority, and ethnic patients have a tendency to experience over prescribing
- Patients with a physical impairment
- Patients with a cognitive impairment
- Patients with communication difficulties
- Gender and sexual orientation
- Age
- Pregnant patients (see specialist advice)
- Ensure that all interventions are proportionate to the risk and potential seriousness of harm, used for no longer than necessary, and the least restrictive option to meet the need. They must also take into account the patient's preferences if known (https://www.nice.org.uk/guidance/ng10). opens in a new tab

Pharmacological Treatments

The common clinical practice of Rapid Tranquilisation (RT) is used when appropriate psychological and behavioural approaches have been exhausted. Patients should only be treated with the following medicines after an assessment of risk and when it has been established that the risk of not doing so is greater than the risk of acute pharmacological treatment. The nurse in charge should brief all staff involved in the pharmacological intervention and the course of action required.

For clinical decision making algorithms and drug doses refer to Appendices 1 (for adults) - opens in a new tab - and Appendix 3 (older adults) – opens in a new tab.

Consideration should be given to any co-existing medical illnesses, and any regularly prescribed medication, for example:

- Oral antipsychotics:
    - Consider total dose for regular and prn

    - Include depot antipsychotics
- Oral benzodiazepines:
    - Consider benzodiazepines already prescribed for regular administration (additional PRN doses may have little effect)
- Substance misuse or alcohol intoxication
    - Consider using antihistamines over benzodiazepines

Avoid benzodiazepines in patients who are physically unwell, delirious or who have significant respiratory impairment. Use benzodiazepines in preference to antipsychotics in patients with cardiac disease, as these are safer, but beware of accumulation. Benzodiazepines should also be used in preference to antipsychotics in antipsychotic naive patients.

Caution needed regarding increased fall risk, particularly with older adults with sedative medications. Caution is also needed regarding the use of sedative antihistamines in older adults due to effect on cognition and increased falls risk.

Consider the above carefully as this may impact on dose requirements and potential side effects.

If the total daily combined dose of any medication is above BNF limits, the consultant psychiatrist must be contacted to discuss, out of hours the on-call consultant should be consulted. Polypharmacy within a class of medication (e.g. antipsychotics), where at all possible, should be avoided.

Oral medication should always be before intramuscular (IM) treatment is administered. If oral medication is repeatedly refused, the decision to administer IM medication against the person's wishes will be taken jointly by medical and/or qualified nursing staff. Once the decision has been made to administer IM medication, the nursing team should consider the most appropriate environment for the patient to have the IM administered, which will cause the least distress for the patient. This may mean ensuring other patients are moved away to another area.

Restrictive Physical Interventions

"Physical restraint is a type of restrictive intervention which refers to any direct physical contact where the intention is to prevent, restrict, or subdue movement of the body (or part of the body) of another person."

(MHA Code of Practice 2016).

Hywel Dda has a BILD Act/RRN certified model of training; HDUHB Restraint Reduction training. This is run by the Reducing Restrictive Practice Team

In the event that Restrictive Physical Intervention (RPI) is required, the nursing team should take into account what staff are on shift, who has a good rapport with the patient and consider staff who are competent in RPI and with previous experience of being involved in high risk situations.

It may be that portering staff trained in RPI are called to assist. The staff should have the opportunity to have all the relevant information (including legal framework) provided to them so that they can make an informed decision about the use of Restrictive Physical Intervention. Any physical health problems or physical disabilities should also be made known to the staff to ensure the safety of the patient.

Staff that attend RPI training are taught the importance of monitoring the patient's physical condition during RPI. All staff involved in a restraint are taught to monitor physical and psychological changes during restraint. The registered nurse is responsible for ensuring that the patient's physical and psychological state is monitored during and after a restraint.

Post restraint physical health monitoring should be undertaken which is detailed later in this document.

Older people

Many older people remain physically fit, though are still likely to have greater sensitivity to side-effects of medication due to physiological changes that occur as we age. The lower minimum/maximum dose compared with adults reflects this lower tolerability.

Those least tolerant are older people who are clearly chronically frail or have a concurrent medical illness including dementia, especially Lewy body dementia. Therefore, frail older people should be given only the lowest dose of the dose range.

Particular care should be given to co-existing medical states and prescribed medication, the risk of accumulation of sedatives and the possibility of delirium. High doses of benzodiazepines can cause respiratory depression and should be avoided in service users who have significant respiratory impairment. The use of antipsychotics is cautioned in elderly service users with dementia. Consideration should be given into requesting specialist input into behaviour plans for service users with dementia. An increased risk of stroke has been implicated with all antipsychotics, therefore the balance of risks and benefits should be considered before prescribing antipsychotic drugs for elderly service users.

Should RPI be required for an older adult then the staff training in RPI should give consideration to the patient's physical state and utilise any adapted techniques specific for the older adult population

Patients with Learning Disabilities (LD)

- Ensure all efforts have been made with adapted communication styles to offer oral medication

- Explore existing conditions that may be negatively impacted by the use of RT and restraint such as Downs Syndrome with Atlanto-Axial Instability (affects approximately 20% of people), or Ehlers-Danlos Syndrome (hypermobility of joints).
- Note that epilepsy is significantly increased in patients with LD, ADHD and ASD
- Explore medication, particularly patients with epilepsy and long-term use of benzodiazepines which contra indicates use of flumazenil in an emergency
- Explain to the patient what is happening as it happens
- A return to baseline behaviour may take longer than anticipated due to processing speeds of information

Any debrief may need to be adapted to meet the communication needs of the individual. The Health Board has an easy read post-incident feedback form upon request from the Reducing Restrictive Practice Team

Autistic adults

Up to 10% of adults in inpatient mental health settings are autistic, even though autistic adults represent 1% in the general population. (Autistica Action Brefing: Adult mental Health March 2019)

In view of this the following points are recommended for autistic patients requiring intervention whilst exhibiting behaviours that challenge

- Staff teams must be aware of the core features of autism and how these manifests in each individual autistic patient
- Staff should involve and liaise with professionals from the community who know the person well, and with the person's permission, friends, partners or family members who know the person well (NCG 142)
- Primary prevention strategies are imperative for the autistic person and should include a full assessment of their sensory needs, anxiety reducing routines/strategies and fit between ward rules and expectations, and communication needs and strategies.
- Staff should routinely use the Autism Friendly environment checklist (NCG 142 approved resource) and identify times, areas, activities that are anxiety reducing for the autistic person.
- There should be a debrief after RPI to understand how to prevent any future incident, which should include checking any questionnaires for ambivalence in communication and checking the autistic person's understanding of the incident.
- The autistic person should be actively involved in co-production of any Positive Behaviour Support plans pertaining to the ward situation and their views and opinions actively sought and incorporated. This should include seeking the views of the person's wider network such as family and friends, if permission for this is given.
- Staff should listen to what is said rather than making assumptions based on non-verbal communication. Consideration should be given to the fact that an Autistic person may be unable to communicate well about emotional states. There may also be a decline in communication if there are sensory issues such as noise or people behaving unpredictably in the environment. Verbal communication from staff dealing with challenging should be concrete, closed and unambivalent.
- Medication should be used with extreme caution with close attention to side effects and staff should be aware that side effects may be reported in idiosyncratic ways.
- The Health Board's Integrated Autism Service can be contacted to support staff in understanding how best to support Autistic people in their care

Drugs used in rapid tranquillisation

The algorithm for the management of violence and physically threatening behaviour in Adults is in Appendix 1 – opens in a new tab & Appendix 3 – opens in a new tab. It contains the recommended doses and medicines to be used.

9.1Short acting antipsychotics: background information

Drug	Route	Formulations	Pharmacokinetics	Maximum Daily Licensed Doses	Major side effects	Notes
Aripiprazole	IM	7.5mg/mL	Peak 1-3hrs t½ 75-146hrs	Maximum daily dose 30mg including all formulations	Nausea, dizziness, somnolence	No more than 3 injections in 24 hrs Second injection to be administered **2 hours** after first injection Monitor for excessive sedation and postural hypotension
Haloperidol	Oral	5mg and 10mg tablets 2mg/ml liquid	Peak 4 hrs t½ 21 hrs	20mg	EPSE Hypotension NMS Increased QTc Arrhythmias Seizures Sudden death	Note risk of acute dystonias, which is higher in older people. If IM haloperidol is used, consider prescribing 5-10mg procyclidine IM or 1-2mg Benztropine mesylate IM to reduce risk of EPSE **
	IM	5mg/ml injection	Peak 20 mins t½ 21 hrs	20mg 5mg (elderly)		Caution if using in antipsychotic naive patient. Consider using lorazepam alone or a low dose of haloperidol (2.5mg-5mg). ** Benztropine is unlicensed in the UK Procyclidine IM is being discontinued, stock exhausted by end January 2026

Drug	Route	Formulations	Pharmacokinetics	Maximum Daily Licensed Doses	Major side effects	Notes
						ECG is recommended by manufacturer prior to treatment in all patients, owing to rare reports of QTc prolongation and ventricular arrhythmias Never mix haloperidol and lorazepam in the same syringe
Olanzapine	Oral	5mg and 10mg tablets 5mg and 10mg orodispersible tablets	Peak 5-8hrs t½ 32-51hr	20mg including all formulations	Hypotension Bradycardia Hypoventilation	Less likely to cause EPSE than haloperidol Monitor for excessive sedation
	IM	5mg/ml injection	Peak 15-45 minutes t½ 30hrs	20mg including all formulations		IM administration results in initial plasma concentration 5 times higher than same dose given orally. N.B. Only an unlicensed IM formulation is available in the UK A maximum of three injections in 24hrs. Olanzapine IM should not be administered for more than 3 consecutive days Second injection to be administered **2 hours** after first injection **IM benzodiazepines cannot be given within 1 hr of IM olanzapine**

Drug	Route	Formulations	Pharmacokinetics	Maximum Daily Licensed Doses	Major side effects	Notes
Risperidone	Oral	1mg and 2mg tablets 1mg and 2mg orodispersible tablets 1mg/ml liquid	Peak 1-2hrs t½ 18hrs	16mg N.B. Doses above 6mg rarely used as increased incidence of PSEs (Parkinsonian side effects)	EPSE Hypotension	Not a highly sedative antipsychotic Can be used in combination with 1-2mg lorazepam

9.2 Benzodiazepines

Lorazepam	Oral	1mg tablets	Peak 2hrs t½ 12hrs	4mg (Adults) 2mg (Elderly)	Respiratory depression	Lorazepam should be mixed in a 1:1 ratio with water for injections before administration
	IM	4mg/ml injection	Peak 60-90mins t½ 12-16hrs	4mg (Adults) 2mg (Elderly)	Disinhibition	Doses above BNF limits should be authorised by a consultant psychiatrist and be reviewed regularly Doses above BNF limits can go up from 4mg in increments to 8mg, 12mg and 16mg on consultant psychiatrist authorisation only

Flumazenil

Flumazenil should be administered by a doctor if respiratory rate drops to below 10/min (or oxygen saturation <90%) due to the sedative effects of benzodiazepines. If no doctor on site 999 to be called as well as the on-call medic. Repeated doses may be required as it is short acting (see section 10 for further dosing details). Flumazenil is best avoided in patients with epilepsy – start mechanical ventilation instead.

Flumazenil is kept in the emergency boxes which can be located on all wards.

9.3 Antihistamines

Promethazine	Oral	25mg tablets 5mg/ml liquid	Peak 2-3hrs t½ 7-15hrs	60mg	Prolonged sedation Seizures Cardiorespiratory depression	IM promethazine is a suitable alternative to IM lorazepam during a national shortage Give by deep IM injection into a large muscle mass. No dilution is required May be considered in those who are antipsychotic naive who have been administered the maximum dose of medication or who are benzodiazepine tolerant
	IM	25mg/ml injection	Peak 1-2hrs t½ 7-15hrs	100mg		

Drugs not recommended for RT

- Oral/IM chlorpromazine (intramuscular is extremely painful and there is a severe risk of severe hypotension)
- IM diazepam (to be avoided due to erratic and slow absorption)
- IM depot antipsychotics (including zuclopenthixol acetate (Clopixol Acuphase®) as the onset of action is delayed and the duration of action is very long.

Risks Associated with Medicines used in RT

In certain circumstances prescribing outside the health board guidelines may be appropriate. A risk benefit analysis should be recorded in the patient health record and a rationale in the care plan. Where the risk benefit is unclear, consideration should be given to seeking advice from clinicians who are not directly involved in the care of the patient. There are specific risks associated with the different classes of medications that are used in rapid tranquilisation. The specific properties of the individual drugs should be taken into consideration. When combinations are used, risks may be compounded. (Also see section 7). Staff need to be aware of the following:

For benzodiazepines (i.e. lorazepam)

- Loss of consciousness
- Respiratory depression or arrests
- Cardiovascular collapse (in patients receiving both clozapine and benzodiazepines)
- Paradoxical increases in aggression
- Worsening of delirium – ensure delirium is excluded before using benzodiazepines.
- Increased risk of falls

For antipsychotics (i.e. olanzapine and haloperidol)

- Loss of consciousness
- Cardiovascular and respiratory complications and collapse (risk arrhythmias and sudden death)
- Seizures
- Subjective experience of restlessness (akathisia)
- Acute muscular rigidity (dystonia)
- Involuntary movements (dyskinesia)
- Neuroleptic malignant syndrome
- Excessive sedation.

For antihistamines (i.e. promethazine)

- Excessive sedation
- Painful injection
- Additional muscarinic effects
- Hypotension

- Arrhythmias.
- Further deterioration in cognition with sedative antihistamines

Extra care should be taken when implementing rapid tranquilisation in the following circumstances:

- The presence of congenital cardiac conduction abnormality
- The concurrent prescription or use of other medication that lengthens QT intervals on ECG both directly and indirectly
- The presence of certain disorders affecting metabolism, such as stress and extreme emotions, and extreme physical exertion (hypokalaemia, dehydration).

Monitoring and management of side effects

All patients who receive any parenteral drug for RT should have their

- temperature
- pulse
- blood pressure
- respiratory rate.

Monitored by ward staff every 5-10 min for 1 hour (as per table below), then half-hourly until patient is ambulatory. Refer to Appendix 2 – opens in a new tab - for an outline of required safety measures.

Patients who refuse to be monitored or who remain too behaviourally disturbed to be approached should be observed for signs/symptoms of pyrexia, hypotension, over sedation and general physical well-being. For patients that refuse physical monitoring this must be clearly documented in the patient's health records.

In the event of a patient sleeping or who is unconscious, the continuous use of pulse oximetry to measure oxygen saturation is desirable. A nurse should remain with the patient until ambulatory.

ECG monitoring is recommended by the manufacturer of haloperidol prior to treatment in all patients, owing to rare reports of QTc prolongation and ventricular arrhythmias. When parenteral antipsychotics are administered (especially high doses) electrocardiogram and monitoring of U&E's is advised due to the risk of cardiac arrhythmias with hypokalaemia, stress and agitation.

For details on the management of side effects after RT, refer to Table 1 below.

The nurse administering the medicine for RT is responsible for subsequent monitoring arrangements. A full set of observations should be completed and recorded on the NEWS2 chart and the Monitoring of Physical Wellbeing following Rapid Tranquilisation chart -Appendix 4 and any physical deterioration should be referred to a doctor immediately.

Table 1: Management of side-effects

<table>
<tr><th>Problem</th><th>Remedial Measures</th></tr>
<tr><td>Patient asleep</td><td>Monitor patient’s respiratory rate every 10 minutes, if unrousable monitor every 5 minutes. If respiratory rate reduced (<10/min) or oxygen saturation falls below 90%, follow guidance below.</td></tr>
<tr><td>Reduced respiratory rate <10/min

Oxygen saturation < 90% (normal is 95-100%)</td><td>Initiate continuous monitoring.

Give oxygen, raise legs, ensure patient is not lying face down.

Respiratory depression is benzodiazepine-induced.
Give flumazenil only if respiratory depression is benzodiazepine-induced.
Flumazenil is kept in the emergency boxes which can be located on all wards.

Guidelines for use of flumazenil
<table>
<tr><td>Contraindications:</td><td>Patients with epilepsy who have been receiving long-term benzodiazepines</td></tr>
<tr><td>Caution:</td><td>Hepatic impairment (titrate dose carefully)</td></tr>
<tr><td>Dose:</td><td>Initial dose: 200microgram intravenously over 15 seconds

If required level of consciousness not achieved after 60 seconds then:

Subsequent doses: 100microgram intravenously over 10 seconds, repeated after 60 seconds if necessary</td></tr>
<tr><td>Maximum dose:</td><td>1mg in 24hours (one initial dose and eight subsequent doses)</td></tr>
<tr><td>Monitoring</td><td>Monitor respiration until rate returns to baseline.
If respiratory rate does not return to normal or patient is not alert after initial doses, assume that sedation is due to another cause and refer to doctor.</td></tr>
</table></td></tr>
</table>

	If respiratory depression is induced by other medicines or causes patient will require mechanical ventilation – arrange transfer to ITU immediately
Orthostatic or diastolic hypotension (<50mmHg)	**Lie patient flat,** raise legs if possible. Tilt bed towards head. Monitor closely
Acute dystonia, including oculogyric crisis	Procyclidine 5-10mg IM or IV should be given, older adults: 2.5-5mg or Benztropine mesylate1-2mg IM or IV ** ** Benztropine is unlicensed in the UK Procyclidine IM is being discontinued, stock exhausted by end January 2026
Irregular or slow (<50/min) pulse	**Refer** to specialist care immediately. ECG essential
Increased temperature	**Withhold antipsychotics** as risk of neuroleptic malignant syndrome (NMS) and perhaps arrhythmia. ▪ monitor closely ▪ cool patient ▪ check creatinine kinase, BP, FBC, U&Es, MSU Refer to medical team if continued signs of NMS present: ▪ sweating ▪ hypertension or fluctuating BP ▪ tachycardia ▪ muscular rigidity ▪ confusion ▪ agitation ▪ altered consciousness

Post Incident Review

Post incident review by nursing staff should consist of:

- An immediate debrief following restrictive physical intervention and sedation between the staff involved to check in on physical and psychological wellbeing.
- A debrief should take place when the patient is ready and they should be given the opportunity to complete the post incident questionnaire. Consideration should be given to the timing and staff facilitating a debrief.
- Post incident questionnaire should be returned to the RRPT
- This should aid the patient to describe and discuss their experience with a member of the team if they wish. The carer and/or an advocate may be involved in this process if appropriate. Discuss completion of an advance directive for future preferred treatment options with the patient.
- Recording of events, completion of a restrictive practice record on Datix system detailing restrictive practices used i.e. chemical restraint, restrictive physical intervention, seclusion etc. A detailed entry in the patient's clinical notes.
- Update and amend if needed the patient's risk assessment, person centred behaviour support plan. Any care plans should be reviewed with the patient where practicable.
- Sharing of any reflection or learning from staff or patient feedback that may improve the process in the future.

- For service users and staff consider a psychological impact assessment and make arrangements for further emotional support as needed.

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Acknowledgements

The guidelines have also been adopted from those of:

The Maudsley Prescribing Guidelines

Southampton University Hospitals NHS Trusts. Adult Rapid Tranquilisation: Policy and Guidance for use in Patients Displaying Acutely Disturbed or Violent Behaviour Oct 2014

East London NHS Foundation Trust. Rapid Tranquilisation Policy for Adults and Older People August 2014

Appendix 1: Algorithm for the Pharmacological management of Rapid Tranquilisation in Adults

ADULTS - FIRST LINE - Non-Pharmacological Measures

e.g. Secondary preventative measures as documented in patient's care plan/positive behaviour support plan

SECOND LINE - Offer Oral Drug Treatment (consider if non-pharmacological methods fail)

Consider the following as first-line treatment options:

- Lorazepam 1-2mg
- Promethazine 25-50mg

Consider an antipsychotic if NOT already taking a regular oral or depot antipsychotic

- Olanzapine 10mg OR
- Risperidone 1-2mg OR
- Haloperidol 5mg (last resort, pre-treatment ECG required)

Continue non-pharmacological measures, if risk persists after 45-60 minutes (wait longer with promethazine):

Consider further oral drug treatment, as above (combine sedatives and antipsychotics, if necessary).

THIRD LINE - Intramuscular (IM) Treatment

(Consider if two oral doses fail, or sooner if patient is placing themselves or others at significant risk)

• **Lorazepam 2mg**	⇨ Have flumazenil to hand in case of benzodiazepine induced respiratory depression
OR	
• Promethazine 25-50mg	⇨ IM promethazine is a useful option in a benzodiazepine-tolerant patient
OR	
• Aripiprazole 9.75mg	⇨ Less hypotension than olanzapine but may be less effective
OR	
• Olanzapine 10mg	⇨ IM olanzapine and IM benzodiazepine administrations should be separated: At least 1 hour for lorazepam
OR	
• Haloperidol 5mg	⇨ Haloperidol should be the last drug considered High incidence of acute dystonia; ensure IM procyclidine or Benztropine ** is available – pre-treatment ECG required

If risk persists after 30-60 minutes consider:

Further IM drug treatment, as above (including combinations e.g. Lorazepam + Haloperidol OR Promethazine + Haloperidol (last resort + ECG) **Never mix 2 drugs in the same syringe**.

If risk persists after 30-60 minutes:

Seek expert advice from the consultant or senior clinical pharmacist on-call.

Appendix 2: Safety Measures

Safety Measures

Always have available for immediate use

- Flumazenil
- Facilities for mechanical ventilation
- Pulse oximeter
- Sphygmomanometer
- Thermometer

For all patients receiving parenteral treatment,

Monitoring consists of the below and a full set of observations on the NEWS2 chart

- Temperature
- Pulse
- Blood Pressure
- Respiratory rate

Every 5-10 minutes for 1 hours, then half hourly until the patient is up and about

Patients who refuse to have their vital signs monitored or who remain high risk to be approached should be observed for signs of:

- Pyrexia
- Hypotension
- Oversedation
- General physical deterioration

For patients who are fully sedated (very deep sleep or unconscious)
Also monitor:

- Oxygen saturation (by pulse oximetry)
- Ensure airway is clear

Nurse to remain with patient until they are up and about

For all IM antipsychotics, it is strongly recommended to have a:

- Pre-treatment ECG

Appendix 3: Algorithm for the Pharmacological management of Rapid Tranquilisation in OLDER ADULTS

OLDER ADULTS - FIRST LINE - Non-Pharmacological Measures

e.g. Secondary preventative measures as documented in patient's care plan/positive behaviour support plan

SECOND LINE - Offer Oral Drug Treatment (consider if non-pharmacological methods fail)

Consider the following as first-line treatment options:

- Lorazepam 0.5-1mg
- Promethazine 25-50mg

Consider an antipsychotic if NOT already taking a regular oral or depot antipsychotic

- Olanzapine 2.5-10mg OR
- Risperidone 0.5-1mg OR
- Haloperidol 2.5-5mg (last resort, pre-treatment ECG required)

Continue non-pharmacological measures, if risk persists after 45-60 minutes (wait longer with promethazine):

Consider further oral drug treatment, as above (combine sedatives and antipsychotics, if necessary).

THIRD LINE - Intramuscular (IM) Treatment

(consider if two oral doses fail, or sooner if patient is placing themselves or others at significant risk)

• **Lorazepam 0.5-1mg** OR	Have flumazenil to hand in case of benzodiazepine induced respiratory depression
• Promethazine 12.5-25mg OR	IM promethazine is a useful option in a benzodiazepine-tolerant patient
• Aripiprazole 5.25-9.75mg OR	Less hypotension than olanzapine but may be less effective
• Olanzapine 2.5-5mg OR	IM olanzapine and IM benzodiazepine administrations should be separated: At least 1 hour for lorazepam
• Haloperidol 0.5-2.5mg	Haloperidol should be the last drug considered High incidence of acute dystonia; ensure IM procyclidine or Benztropine ** is available – pre-treatment ECG required

If risk persists after 30-60 minutes, consider:

Further IM drug treatment, as above (including combinations e.g. Lorazepam + Haloperidol OR Promethazine + Haloperidol (last resort + ECG) **Never mix 2 drugs in the same syringe**.

If risk persists after 30-60 minutes:

Seek expert advice from the consultant or senior clinical pharmacist on-call.

Appendix 4 - Monitoring of Physical Wellbeing Following Rapid Tranquillisation

Patient name……. **Time rapid tranquillisation administered……**

Medication administered…… **Dose……..**

TIME POST RT/CLOPIXOL ACUPHASE	BP	PULSE	TEMP	RESPS	LEVEL OF CONSCIOUSNESS	NOT POSSIBLE? GIVE REASON	SIGNATURE
10 MINS							
20 MINS							
30 MINS							
40 MINS							
50 MINS							
60 MINS							

If patient is asleep/unconscious, a nurse should remain with them and maintain continuous O2 levels.

TIME POST RT/CLOPIXOL ACUPHASE	BP	PULSE	TEMP	RESPS	LEVEL OF CONSCIOUSNESS	NOT POSSIBLE? GIVE REASON	SIGNATURE
90 MINS							
2HOURS							
2 ½ HOURS							
3 HOURS							

When a patient has only received oral or depot medication, monitoring should consist of regular observation for signs and symptoms of high temperature, low BP (weakness, dizziness, palpitations or confusion), over-sedation or any other sign so physical distress.

Action taken to prevent further incidents

	YES	NO	DATE	SUMMARY of ACTION
Obs Levels Reviewed?				
Risk assessment reviewed?				
Care plan amended?				
MHA Status reviewed?				
Involved staff debriefed?				
Any other action?				

Patient's perception of Incident/De-brief

Person completing Form:…… **Designation:…….**

Signature:……. **Date: ……**