Livewell Southwest

Rapid Tranquillisation Policy

for Use in Children and Young People

Aged 12 to 18 Years

Child and Adolescent Mental Health Service

Version No.1.5
Review: July 2017

Notice to staff using a paper copy of this guidance.

The policies and procedures page of LSW Intranet holds the most recent version of this document and staff must ensure that they are using the most recent guidance.

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Asset Number: **761**

Reader Information

Title	Rapid Tranquillisation Policy for Children and Young People Aged 12 to 18 Years. v1.5
Information Asset Register Number	761
Rights of Access	Public
Type of Formal Paper	Policy
Category	Clinical
Document Purpose and Description	Rapid Tranquillisation in Children and Young People Inpatients. To provide guidance on the short-term management (up to 72hrs) of acutely disturbed mental health patients aged 12 to 18
Author	Service Manager CAMHS Tier 4 Mental Health Pharmacist
Ratification Date and Group	Medicines Governance Group 6th Dec 2013.
Publication Date	22nd December 2016
Review Date and Frequency of Review	Two years after publication, or earlier if there is a change in evidence.
Disposal Date	The PRG will retain an e-signed copy for the archive in accordance with the Retention and Disposal Schedule, all copies must be destroyed when replaced by a new version or withdrawn from circulation.
Job Title of Person Responsible for Review	Service Manager CAMHS Tier 4 Clinical Pharmacist Mental Health
Target Audience	Mental Health Staff working in all inpatient children and young people mental health units
Circulation List	Electronic: Plymouth Intranet and LSW website Written: Upon request to the Policy Ratification Secretary on ☎ 01752 435104. Please note if this document is needed in other formats or languages please ask the document author to arrange this.
Consultation Process	Circulated to: Dawn Slater, Steve Cooke, Policy Ratification Group, Dr. Sarah Huline-Dickens, . Dr. Fernanda Garcias-Costas , Dr. Gisa Matthies.
Equality Analysis Checklist completed	Yes
References/Source	Children's BNF 2013-14 NICE Clinical Guideline 25: The short-term management of disturbed/violent behaviour in in-patient psychiatric settings and emergency departments. February 2005 Prescribing Guidelines 11th Edition. The South London and Maudsley NHS Trust. 2011 NPSA Rapid Response Report: Resuscitation in mental health and learning disability settings. Nov 2008 (NPSA2008/RRR010)

	British National Formulary No. 66 Sep 2014 "The Legal Aspects of the Care & Treatment of Children & Young People with Mental Disorder**:** A guide for Professionals. DoH/NIMHE Jan 2009".
Supersedes Document	Version 1.4
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Document Review History

Version No.	Type of Change	Date	Originator of Change	Description of Change
0.1	New document	June 2009	Service Manager CAMHS Tier 4	
0.2	Consultation Changes	July 09	Service Manager CAMHS Tier 4 Clinical Pharmacist Mental Health Resuscitation Officer	Minor corrections. Changes to Medication Flow Chart and subsequent prescribing notes Changes to Basic Life Support, Life Signs Monitoring & Airway Management.
1	Minor changes following Policy group	July 09	Policy Ratification group secretary.	Deleting a sentence, making chart into an appendix.
1:1	Reviewed	Aug 2011	Author	Reviewed, no changes made.
1.2	Reviewed	Nov 13	Mental Health Pharmacist	Reformatted to LSW template Incorporation of atypical antipsychotics and other changes for consistency with adult policy.
1.3	Ratified	7/2/14	Chief Pharmacist	Following approval at MGG Dec 2013
1.4	Extended	April 2016	Chief Pharmacist	Extended and formatted to Livewell

1.5	Extended	December 2016	Clinical Director of Pharmacy	Extended no changes

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Rapid Tranquillisation Policy for use in Children and Young People Aged 12 to 18 Years

1 Introduction

1.1 This policy has been prepared for the short-term management (up to 72 hours) of acutely disturbed mental health patients aged 12 to 18 years in inpatient units.

1.2 Rapid tranquillisation should be used only when appropriate behavioural and psychological interventions have failed. It is intended to calm the patient using the minimum effective dose of medication, without over-sedation, to manage extremely disturbed behaviour quickly whilst reducing the risk of harm, and to protect the patient's safety and dignity.

2 Purpose

2.1 NICE Guidance has been published for the short-term management of disturbed/violent behaviour in inpatient settings and emergency departments (CG025). However, the guidance recommends that local protocols are produced to cover all aspects of Rapid Tranquillisation.

2.2 The purpose of this policy is to give local guidance on:

- Appropriate medication choices for Rapid Tranquillisation
- How to monitor the patient following the use of medication
- Staff training requirements
- Administering medication within the legal limits of the Mental Health Act 1983

3 Duties

3.1 LSW Board, through the Safety, Quality & Performance Committee has the corporate responsibility to ensure the implementation of the policy.

3.2 Service Manager CAMHS Tier 4/ Mental Health Pharmacist have the responsibility to draft the policy, consult with all relevant parties and present to the Medicines Governance Group for ratification.

3.3 The Nurse in Charge (or Manager) of each ward/unit is responsible for:

- Ensuring all staff within their area of responsibility are aware of, understand and comply with this policy and understand the legal implications of failing to do so

- Ensuring all staff within their area of responsibility attend regular training for BLS, use of pulse oximeters and properties of the medication used for Rapid Tranquillisation (see policy section 7)

3.4 Medical Staffing are responsible for inviting junior doctors to attend a session on medication used in Rapid Tranquillisation within their induction programme and for keeping a record of attendance

3.5 Chief Pharmacist has responsibility for allocating a pharmacist to be available to offer a session on medication used in Rapid Tranquillisation to junior and senior medical staff who were unable to attend their induction session (or started with the Trust at other times) or who require an update.

3.6 Medical Staff are responsible for ensuring they are aware of, understand and comply with this policy and understand the legal implications of failing to do so and that they are up to date with the training requirements (Policy Section 7).

4 Definitions

BNF	British National Formulary
BNFc	British National Formulary for Children
IM medication	Medication given by intramuscular injection
NMS	Neuroleptic Malignant Syndrome
Parenteral medication	Medication given by subcutaneous, intramuscular or intravenous injection
Polypharmacy	The concomitant use of more than one drug of the same class
PRN	(Pro re nata). Medication given on a “when required” basis
SCT	Supervised Community Treatment
SOAD	Second Opinion Appointed Doctor
Summary of Product Characteristics	Published information on the licensed parameters of a medicine, in line with MHRA (Medicines and Healthcare Regulatory Authority). Available at www.medicines.org.uk

This policy covers patients between 12 and 18 years only.

Patients 18 years and over	Rapid Tranquillisation Guidelines for use in adults aged 18 years and over are available on LSW IntraNET
Additionally for Patients over 65 years	Guidelines are available for the Management of Acute Confusion (Delirium) in Older People in Chapter 4 of the Plymouth Area Joint Formulary

5 Assessment of Patients

5.1 Taking a full history from the patient is frequently not possible in the acute situation. However, the majority of patients presenting with acutely disturbed behaviour will be known to mental health services. Obtain as full a history as possible from the patient, family, old case notes and from information from colleagues, GP and police. Consult any advance directives. Try to establish:

- Patient’s current and past medication (prescribed and non-prescribed)

- Whether patient has previously been treated with antipsychotics
- Whether patient has history of severe reaction to antipsychotics, e.g. dystonia's, extrapyramidal side effects, neuroleptic malignant syndrome
- If patient is taking clozapine
- If patient has taken illicit substances/overdose

5.2 Make a comprehensive mental state examination with particular attention to hostility, aggression and withdrawal and their relationship to manic and psychotic symptoms.

5.3 Assess physical state, as far as possible, without exacerbating the situation. Pay attention to state of hydration. Consider:

a) Acute psychosis (may be drug induced)
b) Mania
c) Acute confusional state or other organic disorder including adverse reaction to prescribed or non-prescribed medicines. Investigate medically and start physical treatment
d) Acute stress reaction in a vulnerable individual.

5.4 Make a risk assessment and a working diagnosis and treatment plan. Document these in the patient's notes. In all cases the young person must be informed of the treatment plan.

5.5 Document any intervention necessary to manage an individual's disturbed/violent behaviour, with reasons for the clinical decision. Consider including specific interventions in the patient's Care Plan.

5.6 Prescriber should be available for, and responsive to, requests from the patient for medication review.

5.7 **Pregnant or breast feeding young women:** Wherever possible specialist provision should be made in the event that interventions for the short-term management of disturbed/violent behaviour are needed. These should be recorded in the patient's Care Plan. Consultation should be sought from the department of Obstetrics & Gynaecology and if possible, from a psychiatric mother and baby unit.

5.8 The parents/carers of the young person should be informed of the clinical situation. If this is not possible before the use of rapid tranquillisation then it should be completed as soon as possible afterwards.

6. Mental Health Act (MHA) Status

6.1 Informal Patients

6.1.1 If an Informal patient is resisting or aggressive and refusing treatment or threatening to leave the ward, use of Section 5(2) or 5(4) may be necessary to prevent a patient from leaving although neither allows treatment without

patient consent. If treatment is required it may be given under common law "Best Interests" with well-documented reasons recorded in the patients notes (but see below).

6.1.2 In an emergency situation, an informal dangerous patient can be given IM medication under common law, to calm and make safe, whilst a section assessment is awaited. A doctor should be called to the ward to prescribe the medication and record it in the notes with the reason why such a prescription was necessary.

6.1.3 If detention under the Mental Health Act is considered to be necessary the ward staff has the responsibility of arranging the assessment.

6.2 Patients to whom Part 4 of the Mental Health Act Applies

6.2.1 This applies to all patients detained under sections 2, 3, 36, 37[except 37(4)], 38, 44, 45A, 47 and 48. It also applies to patients committed to hospital under the Criminal Procedure (Insanity) Acts and to Supervised Community Treatment (SCT) patients who are recalled to hospital.

6.2.2 **For the first three months** of the patient's detention, medication for mental disorder may be administered by nursing staff under the direction of the approved clinician in charge of treatment. There is no requirement for Second Opinion Appointed Doctor (SOAD) certification, even if the patient refuses consent or is incapable of giving it.
The three month period begins when medication is first administered to the patient following detention under a section to which Part 4 applies.

6.2.3 **After the first three months**, medicine for mental disorder may be administered to a patient either:

a) With his/her capable consent – this must be recorded on statutory Form T2

b) If the administration is authorised by a SOAD (if the patient withholds consent or is incapable of giving it) – this must be recorded on statutory Form T3

6.2.4 In the case of a patient who has been detained and receiving medicine for at least three months it will be unlawful to administer medicine for mental disorder unless it is covered by a Form T2 or T3. The only exception to this is the rule is the case of **urgent treatment**, where MHA 1983 Section 62 may apply (see 6.3)

6.3 Urgent Treatment of Detained Patients

6.3.1 Under the MHA 1983, Section 62, there are some circumstances in which the approved clinician may authorise the patient's urgent treatment.

6.3.2 Urgent Treatment includes treatment that (not being irreversible or hazardous) is immediately necessary and represents the minimum interference necessary

to prevent the patient from behaving violently or being a danger to themselves or others

6.3.3 A Section 62 Urgent Treatment Form must be completed by the approved clinician every time urgent treatment is given under MHA 1983, Section 62

6.3.4 Nurses must also document the administration of the medicine and the reasons for its use.

6.4 Supervised Community Treatment (SCT) Patients Recalled to Hospital

6.4.1 Patients who are recalled to hospital whilst on SCT may be held there for 72 hours. During this period they are subject to the provisions of Part 4 of the Act and as such require certification under section 58 for medication to be given lawfully, **except:**

6.4.1.1 If the three-month period under Part 4 is yet to expire, or it is not yet a month since SCT was implemented (no certification is needed)

6.4.1.2 If the SOAD explicitly authorised the administration of medication upon recall on Form CTO11

6.4.1.3 Treatment that was already being given on the basis of a Part 4A certificate may be continued, pending compliance with section 58, if the approved clinician in charge of the treatment in question considers that discontinuing it would cause the patient serious suffering

6.4.1.4 The approved clinician otherwise uses emergency treatment powers (section 62) to authorise treatment

6.4.2 If none of the above exceptions can be met, a new SOAD visit should be arranged to authorise treatment

6.5 Supervised Community Treatment (SCT) Patients upon revocation of SCT

6.5.1 If the patients SCT status is revoked, they return to detained status. However, the three month rule for administration of medication does **not** apply.

6.5.2 The points 6.4.1 (above) may also authorise treatment upon recall, but only for so long as it takes to arrange a further SOAD

7. Training

7.1 All staff involved in administering or prescribing rapid tranquillisation, or monitoring patients to whom parental rapid tranquillisation has been administered, will receive on-going competency training to a minimum of Basic Life Support with Airway Adjuncts AED Defibrillator including oxygen, on each shift there should be member of staff trained to the level of Intermediate Life Support (ILS – Resuscitation Council UK). Attendance on the ALERT Course

is also recommended. (Acute Life-threatening events, recognition and Treatment) Anaphylaxis training will be required as on-going training for trained staff.

7.2 All staff involved in rapid tranquillisation should be trained in the use of pulse oximeters.

7.3 Prescribers, and those administering medicines, should be familiar with and have received training and regular updates in rapid tranquillisation, including:

- properties of benzodiazepines, flumazenil (benzodiazepine antagonist), antipsychotics, antimuscarinics and antihistamines
- associated risks, including cardio-respiratory effects of the acute administration of the drugs, particularly when the patient is highly aroused, may have been misusing drugs, is dehydrated or is physically ill
- the need to titrate doses to effect

8 Emergency equipment

8.1 Consideration should be given to the close proximity of emergency equipment for effective resuscitation or treatment.

8.2 Flumazenil and procyclidine must be readily available. Only staff trained in the administration of intravenous medication may administer flumazenil. It should be available on all wards/units for use by paramedics and doctors if required.

8.3 A crash trolley should be available within 3 minutes. This should include an automatic external defibrillator, a bag valve mask and oxygen, cannulas, fluids, suction and first-line resuscitation medication.

8.4 The Unit Nurse Manager will ensure the emergency equipment is maintained and checked daily and restocked whenever used.

8.5 At all times a doctor should be available to attend an alert by staff members quickly (within 30 minutes).

8.6 If the clinical circumstances require it is necessary to dial 999 for an ambulance.

8.7 An ECG should be done as soon as possible after administration of an intra-muscular antipsychotic.

9. Medication

9.1 Medication for rapid tranquillisation should be used with caution owing to the following risks:

- loss of consciousness instead of tranquillisation
- sedation with loss of alertness

- loss of airway
- cardiovascular and respiratory collapse
- interaction with medications already prescribed, or illicit drugs or alcohol
- possible damage to patient-staff relationship
- underlying coincidental physical disorders

9.2 Aim to use the minimum effective dose of medication and to keep doses within BNF for Children limits and avoid polypharmacy.

9.3 Only with the agreement of the Consultant Psychiatrist should BNF for Children limits be knowingly exceeded. In such circumstances record this agreement and a risk-benefit analysis in the patient's notes. The monitoring of the patient is particularly important in these circumstances.

9.4 Consider all oral medication taken within the previous 24hrs as part of rapid tranquillisation, including PRN. Where depots are prescribed consider what depot injections have been given over the previous month

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

- presence of congenital prolonged QTc syndromes
- the concurrent prescription or use of other medication that lengthens QTc intervals both directly or indirectly
- the presence of certain disorders affecting metabolism, such as hypo- and hyperthermia, stress and extreme emotions, and extreme physical exertion

9.6 Any patient needing intramuscular doses should be seen by a doctor within 24hrs of administration and their regular prescription reviewed.

9.7 A maximum of **three** IM doses of lorazepam and/or haloperidol may be prescribed at any one time and reviewed after 24hrs. Any patient needing IM doses should be seen by a doctor within 24hrs of administration and their regular prescription reviewed.

9.8 **Lorazepam injection.**
The licensed product is stored in the fridge.
Mix 1:1 with water for injections before use.
Never mix with other injections in the same syringe.
(In the event of manufacturing problems an unlicensed product may be substituted – take care to follow the specific storage and administration directions (no need to dilute with water for some products)

9.9 **Flumazenil** must be available to reverse the effects of benzodiazepine-induced respiratory depression.

If the respiratory rate falls below 10/minute give flumazenil 200 micrograms IV over 15 seconds and assess after 60 seconds. If necessary,

give 100 micrograms every 60 seconds until desired level of consciousness is achieved. Maximum dose 1mg (1,000micrograms) in 24hrs (one initial dose and 4 subsequent doses). Monitor respiratory rate closely as flumazenil has a short half-life and respiratory rate may recover then deteriorate again. Seizures may occur. This medication can only be administered by suitably trained person as this is IV Drug.

9.10 **Haloperidol**

9.10.1 The Summary of Product Characteristics now recommends that a baseline ECG is performed prior to treatment (oral or intramuscular) in all patients, especially patients with a positive personal or family history of cardiac disease or abnormal findings on cardiac clinical examination. During therapy, the need for ECG monitoring (e.g. at dose escalation) should be assessed on an individual basis. Whilst on therapy the dose should be reduced if QT is prolonged, and haloperidol should be discontinued if the QTc exceeds 500ms.

9.10.2 It is appreciated that it is not practical to perform an ECG immediately prior to the administration of Rapid Tranquillisation, in which case the risks and benefits should be considered, bearing in mind the following information taken from the Summary of Product Characteristics for Haldol® :

9.10.3 In common with other neuroleptics, haloperidol has the potential to cause rare prolongation of the QT interval. Use of haloperidol is therefore contra-indicated in patients with clinically significant cardiac disorders e.g. recent acute myocardial infarction, uncompensated heart failure, arrhythmias treated with class IA and III antiarrhythmic medicinal products, QTc interval prolongation, history of ventricular arrhythmia or torsades de pointes clinically significant bradycardia, second or third degree heart block and uncorrected hypokalaemia. Haloperidol should not be used concomitantly with other QT prolonging drugs.

9.10.4 Very rare reports of QT prolongation and/or ventricular arrhythmias, in addition to rare reports of sudden death, have been reported with haloperidol. They may occur more frequently with high doses and in predisposed patients.

9.10.5 The risk-benefit of haloperidol treatment should be fully assessed before treatment is commenced and patients with risk factors for ventricular arrhythmias such as cardiac disease, family history of sudden death and/or QT prolongation, uncorrected electrolyte disturbances, subarachnoid haemorrhage, starvation or alcohol abuse should be monitored carefully (ECGs and potassium levels), particularly during the initial phase of treatment. The risk of QT prolongation and/or ventricular arrhythmias may be increased with higher doses or with parenteral use.

9.10.6 Haloperidol injection is not licensed for use in under those 18.

9.11 When **lithium** is prescribed, consider using lorazepam with a PRN dose of the regularly prescribed antipsychotic instead of haloperidol.

9.12 **Atypical antipsychotics**

9.12.1 Oral Atypical antipsychotics – oral atypical antipsychotics are not licensed for use in rapid tranquillisation. However, use of an oral atypical antipsychotic may be useful in patients who are neuroleptic naive or who are allergic to, or have experienced an unsatisfactory level of side-effects to, haloperidol. The decision to use an atypical antipsychotic must be made by a consultant psychiatrist and recorded in the patients nursing notes. The same monitoring must be followed as for oral typical antipsychotics (haloperidol).

9.12.2 **Olanzapine IM injection –** Discontinued in the UK but available as an unlicensed product. Not licensed for use in under those 18.
Can be used for rapid control of agitation and disturbed behaviours in patients with schizophrenia or manic episode when oral therapy is not appropriate.
Clinical trials have failed to show an increased risk of QTc prolongation above that seen with placebo, nevertheless olanzapine should be used with caution in the patient groups detailed above for haloperidol.
Due to the potential for excessive sedation, cardio-respiratory depression and in very rare cases, death, **do not give parenteral benzodiazepines within 1 hour of IM olanzapine**.
Olanzapine IM injection is approved within LSW as an alternative to Haloperidol IM injection.

9.12.3 **Aripiprazole IM injection –** Not licensed for use in under those 18, licensed for rapid control of agitation and disturbed behaviours in patients with schizophrenia or in patients with manic episodes in Bipolar I Disorder, when oral therapy is not appropriate. In clinical trials of aripiprazole, the incidence of QT prolongation was comparable to placebo. As with other antipsychotics, aripiprazole should be used with caution in patients with a family history of QT prolongation.

Co-administration with parenteral benzodiazepine is NOT contra-indicated but: Simultaneous administration of injectable antipsychotics and parenteral benzodiazepine may be associated with excessive sedation and cardio-respiratory depression. If parenteral benzodiazepine therapy is deemed necessary in addition to aripiprazole solution for injection, patients should be monitored for excessive sedation and for orthostatic hypotension
Aripiprazole IM injection is approved within LSW as an alternative to Haloperidol IM injection.

9.13 **Anticholinergic medication** must be prescribed in the appropriate form when haloperidol is used, e.g.

Procyclidine usually 2.5mg orally three times daily. **or** 5-10mg IM for acute dystonia's repeated if necessary after 20 minutes. Maximum dose 20mg in 24hrs.

When used for acute dystonia procyclidine is usually effective in 5-10 minutes but may need 30 minutes for relief.

10. Data on Antipsychotic Drugs for Rapid Tranquillisation

Nb. Pharmacokinetic data based on adult population unless otherwise stated.

Drug and route	Licensed for:	Pharmacokinetics	Dose	Common side-effects	Notes
Aripiprazole oral	Not licensed for agitated behaviour	Peak 3-5 hours Half-life 75 hours Oro-dispersible are bioequivalent to normal tablets and have same kinetics Oral solution has similar kinetics to normal tablets	No recommended dose for RT. Suggest 10-15mg, repeated up to max 30mg/24 hours (including all routes)	Akathisia, tremor Dizziness Somnolence, Sedation insomnia headache blurred vision dyspepsia vomiting, nausea constipation salivary hyper-secretion restlessness, anxiety	Maximum 30mg in 24 hours via all routes
Aripiprazole IM	Not licensed in under 18s Rapid control of agitation and disturbed behaviours in patients with schizophrenia or in patients with manic episodes in Bipolar I Disorder, when oral therapy is not appropriate.	Onset of action 15-30 minutes Peak 1-3 hours Half-life 75 to146 hours	5.25-15 mg as a single injection. Max. 3 injections in 24 hours. Max. 30 mg in 24 hours (including all routes)	Akathisia Tremor Dizziness Somnolence insomnia sedation headache blurred vision dyspepsia vomiting, nausea constipation salivary hyper-secretion restlessness anxiety	Co-administration with parenteral benzodiazepine is NOT contra-indicated but be aware of the following: Simultaneous administration of injectable antipsychotics and parenteral benzodiazepine may be associated with excessive sedation and cardiorespiratory depression. If parenteral benzodiazepine therapy is deemed necessary in addition to aripiprazole solution for injection, patients should be monitored for excessive sedation and for orthostatic hypotension

Drug and route	Licensed for:	Pharmacokinetics	Dose	Common side-effects	Notes
Haloperidol oral	Adjunct to short term management of moderate to severe psychomotor agitation, excitement, violent or dangerously impulsive behaviour	Oral: Peak 2-6 hours t1/2 20 hours	0.5-3mg up to 3 times daily (up to 5mg three times daily in severely affected cases)	EPSE mental dulling or slowing down dizziness headache paradoxical effects of excitement, agitation or insomnia nausea, dyspepsia. Rarely: Prolonged QTc Arrhythmias	Baseline ECG is recommended prior to treatment in all patients, especially in the elderly and patients with a positive personal or family history of cardiac disease or abnormal findings on cardiac clinical examination. During therapy, the need for ECG monitoring should be assessed on an individual basis. The dose should be reduced if QT is prolonged, and should be discontinued if the QTc exceeds 500 ms.
Haloperidol IM	Not licensed in under 18s	IM: Onset of action: 20-30 minutes t1/2 20 hours	0.025-0.075mg/kg/dose Or 2.5-5mg		
Olanzapine oral	Not licensed for agitated behaviour	Peak 5-8 hours Half-life varies but around 30-36 hours Oro-dispersible are bioequivalent to normal tablets and have same kinetics	No recommended dose for RT. Suggest 10mg, repeated up to max 20mg/24 hours (including all routes)	Sedation Dizziness Postural hypotension Akathisia Mild, transient anticholinergic effects	May cause significant rises in baseline fasting glucose and triglycerides during early days of treatment3
Olanzapine IM	Not licensed in under 18sRapid control of agitation and disturbed behaviours in patients with schizophrenia or manic episode when oral therapy is not appropriate.	Onset of action: 15-30 minutes t1/2 30-39 hours	2.5-10mg Max 20mg in 24 hours (including all routes)	Hypotension Postural hypotension Bradycardia Tachycardia Syncope Injection site discomfort	Do not give parenteral benzodiazepine within 1 hour of IM olanzapine. If the patient has received parenteral benzodiazepine, IM olanzapine administration should only be considered after careful evaluation of clinical status and the patient should be closely monitored for excessive sedation and cardio-respiratory depression

Drug and route	Licensed for:	Pharmacokinetics	Dose	Common side-effects	Notes
Quetiapine oral (NOT XL form)	Not licensed for agitated behaviour	Peak 1.5 hours1 Half-life 12 hours (15-18 hours in 65+ years) including active metabolite	No recommended dose for RT. Dose licensed for schizophrenia/mania is max. 50mg on first day Could be given a higher dose if already taking quetiapine regularly	Orthostatic hypotension Dizziness Syncope Somnolence Tachycardia Dry mouth Constipation Dyspepsia	
Risperidone oral	Not licensed for agitated behaviour	Peak 1-2 hours Half-life 24 hours including active metabolites (up to 33 hours in 65+ years) Oro-dispersible and liquid forms are bioequivalent to normal tablets and have same kinetics	No recommended dose for RT. Suggest 2mg initially repeated as necessary. Max 6mg in 24 hours	Orthostatic hypotension EPSE Dystonia Tachycardia Headache Akathisia, agitation Dizziness Tremor Somnolence, Sedation Vision blurred Vomiting, Nausea Diarrhoea Constipation Dyspepsia Dry mouth	Limited clinical experience or trial data

[1] Sweetman, S (Ed) (2007) **Martindale: The Complete Drug Reference.** London: Pharmaceutical Press
[2] McEvoy, G (Ed) (2003) **AHFS Drug Information.** Bethesda: American Society of Health-System Pharmacists
[3] Kinon, BJ et al (2008) J Clin Psychopharmacol;28:601–607
Other information from the Summary of Product Characteristics for each drug

11. Monitoring patients following use of oral or intramuscular medication for rapid tranquillisation.

11.1 Observation

Regular physical observations (pulse, blood pressure, temperature, respiratory rate, level of consciousness and hydration) plus observations for dystonic reactions must be taken by appropriately qualified staff following use of any short-acting medication for tranquillisation.

If monitoring is not possible, due to patient's level of disturbance, then five minute visual observations should be maintained and recorded until physical observations become possible.

If the patient is sleeping, record respiratory rate, visual observations and use pulse oximeter if possible.

11.2 Observation during seclusion

Take the potential complications of rapid tranquillisation particularly seriously. Monitor the patient 'within eyesight' observation. End the seclusion when rapid tranquillisation has taken effect.

11.3 Frequency of monitoring following parenteral medication:

Recommended monitoring following parenteral use of medication

Pulse
Respiratory rate
Temperature
Level of consciousness
Hydration
Every 15 minutes for first hour

Blood pressure
30 and 60 minutes after injection

THEN

All observations every 30 minutes until patient ambulatory

If patient is unrousable call ambulance and doctor

11.4 Frequency of monitoring following oral medication:

A lower frequency of observation is suitable following oral dosing. Monitor at intervals agreed by the multidisciplinary team until the patient is active again.

If, following oral administration, verbal responsiveness is lost or the patient is sedated or asleep, monitor as for parenteral administration.

12. Remedial Measures following Rapid Tranquillisation

Maudsley Prescribing Guidelines 11th edition

Problem	**Remedial measures** **IN ALL CASES CALL A DOCTOR**
Acute dystonia's Including oculogyric crises	Give **Procyclidine IM** 2-10mg. Repeat if necessary after 20 minutes. Maximum dose 20mg in 24hrs.
Reduced Respiratory Rate falls below 10 breaths/min or oxygen saturation (<90%)	**Ensure patient is not lying face down** Give oxygen, raise legs. **Give flumazenil if benzodiazepine-induced** respiratory depression suspected. If caused by any other sedative agent ventilate mechanically
Irregular or slow pulse <50 beats/min	Refer to specialist medical care Immediately. Call ambulance
Fall in blood pressure >30mm Hg orthostatic drop or < 50mmHg diastolic	Compare with blood pressure on admission Lie patient flat, tilt bed towards head Monitor closely.
Increased temperature Over 38^{o}C and/or increasing	Withhold antipsychotics - risk of Neuroleptic Malignant Syndrome (NMS) and possibly arrhythmias. Check creatinine kinase

13. Documentation

Patients' care plans should include advice on preferred action when rapid tranquillisation is required. The daily evaluation must state what happened regarding the event.

Recording sheets must be completed and filed in the patients' notes. Patient comment is optional.

Patients should be given the opportunity to document their account of the intervention in their notes or on the monitoring sheet, which should be filed in the patient's notes.

14. Monitoring Compliance and Effectiveness

14.1 The auditing of compliance with this policy will become part of the rolling programme of clinical audits maintained by the Clinical Effectiveness & Research Team.

14.2 An audit should take place every 2 years (or sooner if issues or concerns arise) to monitor the following:

- Staff training
- Appropriateness of the use of Rapid Tranquillisation
- The choice of medication in a particular situation
- Adherence to the Mental Health Act
- Monitoring of patients following use of Rapid Tranquilisation
- Documentation, including Service User comments

14.3 The audit will involve examination of the notes of service users known to have received Rapid Tranquillisation in a preceding period of time (this period of time will need to be decided at the time of audit to ensure a reasonable number of patients are included)

14.4 The LSW Mental Health Clinical Pharmacists will be responsible for reviewing the results

14.5 The results will be made available to the Medicines Governance Group, ward/unit managers and medical groups who will be responsible for ensuring any necessary action is taken

All policies are required to be electronically signed by the Lead Director. Proof of the e-signature is stored in the policies database.

The Lead Director approves this document and any attached appendices. For operational policies this will be the Locality Manager.

Signed: Medical Director

Date: 7th March 2014

Appendix A
Rapid Tranquillisation Patient Monitoring Form
File in patients records when completed

Ward **Consultant**	**Patient Name** **Hospital Number** **NHS Number**	**Date** **Time RT started**

Trigger(s) and reason for use:	**Route used: IM □* Oral □+** ***Oral medication offered YES/NO** **+ Frequency of observations:**
	Signature Date **Print name**

Time	**Temp**	**Pulse**	**B.P.**	**Resp. rate**	**Fluid intake**	**#Level of consciousness**	**Dystonic reactions**	**Initials**

Record either 1. awake and active 3. asleep and rousable
2. awake and calm 4. asleep and unrousable – emergency situation

Outcome of rapid tranquillisation episode:

Signature **Date** Continue overleaf if necessary

Service user comment:

Service user did not wish to comment □
Signature **Date** **Time** Continue overleaf if necessary

Appendix B
Guidelines for Rapid Tranquillisation in Children 12 to 18 Years

Assess	**Intervene using non-drug approaches as soon as possible**
Physical state Allergies/sensitivities Diagnosis Potential drug interactions Advance Directives Medication History Care Plan Previous response Total antipsychotic dosage prescribed Current prescription – simplify if possible	Talk down Seclusion/time out Calm, safe environment Low stimulation Explain intentions Non-threatening non-verbal communication Try to develop and maintain a therapeutic relationship throughout

N.B. Seek consultant advice at any stage.
Flumazenil and facilities for resuscitation must be readily available.

Offer oral medication

Lorazepam orally 25 – 30 micrograms/kg (0.5-2mg)
Sedation in 30-45mins, peak 1-3hrs, lasts 4-6hrs
Wait 45-60mins
Repeat up to twice more to **maximum dose of 4mg/24 hours**

Cautions:
Dose reduction needed in children of low weight, renal impairment, hepatic impairment, organic disorder/delirium, alcohol or drug intoxication
Avoid haloperidol in cardiac disease
Increased risk of NMS/neurotoxicity with haloperidol and lithium
Increased risk of cardio-pulmonary collapse with clozapine and benzodiazepines

If conventional antipsychotic prescribed regularly or known history of antipsychotic use, consider addition of:
Haloperidol orally 25- 50 micrograms/kg (1-5mg)
Sedation 1hr, peak 2-6hr, lasts 20hrs.
Wait 45-60 mins
Repeat up to twice more or to **maximum dose of 15mg/24 hours**

If neuroleptic-naive or allergy to haloperidol or history of severe EPSE to haloperidol, consider use of an oral atypical antipsychotic, on consultant advice only - unlicensed use.

Oral medication refused

Consider:
- PRN doses of regularly prescribed antipsychotic
- Increasing regular dose of antipsychotic
- Starting appropriate regular antipsychotic if none prescribed

Lorazepam IM Injection 25–30 micrograms/kg (0.5-2mg)
Maximum single dose of 2mg
(Sedation in 30-45mins, peak 1-3hrs, lasts 4-6hrs)
Wait 30mins. Repeat up to twice more or to **maximum dose of 4mg/24 Hours**

Give separately: never mix drugs in syringe

Where there is a serious risk from prolonged restraint consider adding: IM antipsychotic medication on consultant advice

NB: Anticholinergic may be required with Haloperidol

In the event of inadequate response:
Seek Consultant advice and review adherence to guidelines.

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Refer to full policy for additional information and monitoring required