

SOUTH ESSEX PARTNERSHIP NHS FOUNDATION TRUST

PROCEDURE FOR RAPID TRANQUILISATION (RT)

Controls Assurance Statement

These procedural guidelines aim to ensure that staff are provided with current information and underlying principles considered by the Trust to be essential regarding Rapid Tranquilisation.

The principles contained within this procedure and associated documents will aim to ensure that open communication and respect are the fundamental elements of management of violence and aggression

1.0 Introduction

1.1 This procedure should be read in conjunction with the Rapid Tranquillisation Policy.

2.0 Responsibilities

2.1 **The Director of Integrated Governance and Executive Nurse will ensure**

- Policy and procedures are embedded into clinical practice as well as Best practice Framework and in ensuring these are updated regularly.
- Ensure the identification and implementation of training educational needs arising from any relevant documentation.

2.2 **Directors and Senior Management will**

- Monitor the implementation of this policy via clinical audit and supervision.
- Ensure that Trust Risk Management Teams are appropriately notified on all incidents.
- Be able to evidence that SEPT policies have been followed.

2.3 **Lead Trainers for PMVA, Medicines Management and Enhanced Emergency Skills will**

- Ensure that any changes in professional knowledge and practice is regularly discussed and updated
- Ensure that all Trust Teams are appropriately notified of all current information on practice
- Ensure Training is delivered and monitored with records continually updated
- Encourage staff to take any issues related to RT to clinical supervision

2.4 Managers and other Persons in Charge

- Ensure the procedures and principles detailed within this policy are followed, to meet with all relevant guidance
- Ensure that all patient safety incidents are recorded on the Adverse Incident Report form and where necessary on the Serious Untoward Incident Report form following Trust Policy RM 06 and CP3
- Ensure staff receive appropriate and correct training as per Trust policy
- Ensure any Advance Directives are considered and used if appropriate
- Monitoring the use of RT is an essential part of managing a clinical area. Managers will collate reports to relevant forums ensuring individual instances are objectively reviewed and audit is undertaken
- Ensure that patients who have received RT are supervised/monitored by qualified nursing staff
- Ensure issues related to RT are discussed in clinical supervision

2.5 Individual Staff

- Must adhere to SEPT policy and guidelines.
- Undertake appropriate and approved training as above.

3.0 Training

- 3.1 Training must promote a philosophy which values engagement and respect together with working collaboratively with patients and other professionals.
- 3.2 Diversity of culture, race, gender, age and disability must be respected.
- 3.3 All managers and clinical staff, however senior or junior, should receive mandatory training in all aspects of cultural competency, awareness and sensitivity. This should include training to tackle overt and covert racism and institutional racism⁶
- 3.4 Staff who come into contact with patients must appreciate the complexities of human behaviour regarding the management of violence and aggression including precipitating factors and trigger factors¹
- 3.5 Training in the use and dangers of rapid tranquillisation is as essential as training in de-escalation and restraint. Health professionals should be as familiar with the properties of benzodiazepines as they are with those of antipsychotic²

- 3.6 Staff should attend the relevant training course (see section 3.11) so that they can anticipate possible violence and to de-escalate the situation at the earliest opportunity, and physical means of restraint or seclusion should be resorted to 'only after the failure of attempts to promote full participation in self-care'²
- 3.7 Qualified nurses and Doctors who use rapid tranquillisation should be trained in the assessment and management of service users specifically in this context: this should include assessing and managing the risks of drugs (benzodiazepines and anti-psychotics), using and maintaining the techniques and equipment needed for cardiopulmonary resuscitation, prescribing within therapeutic limits and using flumazenil (benzodiazepine antagonist)²
- 3.8 Health professionals should be able to assess the risks associated with rapid tranquillisation, particularly when the service user is highly aroused and may have been misusing drugs or alcohol, be dehydrated or possibly be physically ill
- 3.9 Health professionals should undertake annual retraining in cardiopulmonary resuscitation techniques as per Trust Policy Cardiopulmonary resuscitation policy CLP 14.
- 3.10 All qualified in-patient nursing staff should be familiar with, and trained in Cardio-Pulmonary Resuscitation (CPR) and in the maintenance and use of resuscitation equipment; this is a fundamental requirement as an anaesthetist or experienced 'crash team' may not be available²
- 3.11 This training needs analysis identifies mandatory/core practice requirements for staff

Mandatory Training	Update Interval	Staff Category	Delivery Method
CPR	Annual	All qualified in patient staff	Direct

Core Practice	Update Interval	Staff Category	Delivery Method
Enhanced Emergency Care	Annual	All qualified in patient staff	Direct
CPR	Annual	All unqualified in patient staff & all grades of community staff that have work directly with Service Users	Direct

- 3.12 All Qualified staff from the work areas listed in the training needs analysis below will be expected to undertake training-relevant to the

use of rapid tranquillisation as part of their mandatory training. Training in rapid tranquillisation forms part of the Prevention and Management of Violence and Aggression course.

Mandatory Training	Update Interval	Staff Category	Delivery Method
<p>PREVENTION/ MANAGEMENT OF VIOLENCE AND AGGRESSION ETHICAL CARE</p> <p>Includes:</p> <ul style="list-style-type: none"> • Breakaways • Restraint • C.P.R. Update • Rapid Tranquillisation • SMS • Anticipating, de-escalating and coping with disturbed/violent behaviour 	<p>Annual 6 day initial 2/3Day update dependant on SMS status</p>	<p>Acute admissions (Adult), Acute/Challenging Behaviour, Learning Disabilities, PICU, Low + medium Secure Forensic.</p> <p>Any other area where a risk assessment shows it is required</p>	<p>Direct</p>

- 3.13 This training guidance should be read in conjunction with the Induction/Mandatory training policy HR21, Prevention and Management of Violence and Aggression Policy CLP 25, Cardio-pulmonary resuscitation policy CLP 14 and Medicine Management Policy CLP13.

4.0 Principles

- 4.1 The psychiatrist and multidisciplinary team should, at the earliest opportunity, undertake a full assessment, including consideration of the medical and psychiatric differential diagnoses. Attention to be given to advance directives if appropriate²
- 4.2 The dose of antipsychotic medication must be individualised for each patient. The prescription will depend on several factors, i.e. age, associated physical disorders and other current medication prescribed.
- 4.3 The service users who participated in the Royal College of Psychiatrists Research Unit's discussion groups reported that when they behaved violently, medication was their preferred option compared with seclusion or prolonged physical restraint³

- 4.4 Note that RT is often viewed as punitive by patients⁴
- 4.5 Plans for the management of individual patients should ideally be made in advance. The aim is to prevent disturbed behaviour and reduce the risk of violence. Nursing interventions (de-escalation, time out), increased nursing levels, transfer of the patient to a PICU and pharmacological management are options that may be employed⁴
- 4.6 In some instances service users may express a particular preference through Advance Directives regarding the medication they wish to be considered, or other strategies to be utilised in managing their aggression. These directives will be respected, although health and safety considerations may determine that other methods of a treatment are used
- 4.7 Drugs, particularly in the context of restraint, should be used with caution because of the following risks²:
- loss of consciousness
 - over-sedation with loss of alertness
 - cardiovascular and respiratory complications and collapse
 - seizures
 - akathisia which can worsen the aggression
 - possible damage to the therapeutic partnership between patient and clinician
 - specific issues in relation to diagnosis
- 4.8 Resuscitation equipments, including flumazenil, must be available and easily accessible²
- 4.9 Because of the serious risk to patients life NICE recommends that service users who are heavily sedated or using illicit drugs or alcohol should not be secluded². There may be exceptional circumstances where this is necessary. In these rare instances an increased level of observations must be maintained because of the risk of sudden collapse/death such as level 3 (maintaining the service user within eyesight) as per trust policy CLP 8 Engagement and Formal Observation Policy.
- 4.10 If a patient is secluded, the potential complications of rapid tranquillisation should be taken particularly seriously², level 3 observations must be maintained by a qualified nurse at least until clinical monitoring of patients vital signs is possible
- 4.11 Violent behaviour can be managed without the prescription of unusually high doses or “drug cocktails”. The minimum effective dose should be used and the BNF recommendations for the maximum doses should be adhered to unless exceptional circumstances arise²

- 4.12 If high dose antipsychotic are used the form “Authority for High Dose Antipsychotic Treatment (HDT) should be completed and the guidance in the Formulary and Prescribing Guidelines should be followed
- 4.13 Clinicians should be aware that absorption from intramuscular administration (I/M) can occur far more rapidly when a service user is agitated, excited or physically overactive¹
- 4.14 Health professionals should be able to assess the risks associated with rapid tranquillisation, particularly when the service user is highly aroused and may have been misusing drugs or alcohol, be dehydrated or possibly be physically ill²
- 4.15 The requirement for enforced IM medication in informal patients should prompt a consideration of the need to assess the implementation of the Mental Health Act⁴
- 4.16 All staff need to be aware of the legal framework that authorises the use of rapid tranquillisation, physical intervention and seclusion. The guidance of the Mental Health Act Code of Practice (chapter 19) should be followed, with any departures from that guidance clearly recorded and justified as being in the service user’s best interest¹

5.0 Route of Drug Administration

- 5.1 Oral medication should be offered before parenteral medication²
- 5.2 If parenteral treatment proves necessary, the intramuscular route is preferred over the intravenous one²
- 5.3 Intravenous administration should only be used in exceptional circumstances and this decision should be made by the consultant and not by junior medical staff.²
- 5.4 In pharmaceutical practice it is stated that if combinations of intramuscular (i/m) injections are used they should not be mixed together in the same syringe¹

6.0 Pharmacological Agents Used in RT

- 6.1 The Trusts’ Formulary and Prescribing Guidelines⁵ should be referred to for detailed guidance on drugs used in RT covering
- remedial measures
 - guidelines for the use of Flumazenil
 - guidelines for the use of Clopixol Acuphase
 - times to max plasma concentration and half life
 - licensed indications

- 6.2 Where the behavioural disturbance occurs in a non-psychotic context, then it is preferable to initially use oral lorazepam alone or intramuscularly if necessary¹
- 6.3 When there is behaviour disturbance in the context of psychosis, to achieve early onset of calming/sedation or to lower the dose of antipsychotic, an oral antipsychotic (haloperidol, olanzapine, risperidone) should be considered in the first instance¹
- 6.4 Olanzapine or Risperidone should not be used for the management of disturbed/violent behaviour in service users with dementia due to the increased risk of stroke and death¹
- 6.5 The intramuscular (IM) preparations recommended are lorazepam, haloperidol and olanzapine²
- 6.6 Wherever possible, a single agent is preferred to a combination²
- 6.7 Olanzapine i/m should not be used 1 hour either side of lorazepam as there have been deaths reported with this combination
- 6.8 When rapid tranquillisation is urgently needed, a combination of IM haloperidol and IM lorazepam should be considered²
- 6.9 Sufficient time should be allowed for clinical response between IM doses of medication for RT¹
- 6.10 IM diazepam and IM chlorpromazine should not be used in rapid tranquilisation²
- 6.11 When using I/M haloperidol (or any other conventional antipsychotic) as a means of managing disturbed/violent behaviour, an antimuscarinic agent, such as procyclidine or benztropine, should be immediately available to reduce the risk of dystonia and other extrapyramidal side effects, and should be given orally, intramuscularly or intravenously as per manufacturer's recommendations¹
- 6.12 The use of two drugs of the same class for the purpose of rapid tranquillisation should not occur¹
- 6.13 Health professionals should understand the cardio-respiratory effects of the acute administration of these drugs and the need to titrate dosage to effect²
- 6.14 There is a risk of respiratory depression when benzodiazepines are given in high doses or when used in combination with other hypnotosedatives, including alcohol and some illicit drugs¹

7.0 Clinical Monitoring of Patients Vital Signs

- 7.1 Patients should not be left unattended. Vital signs must be monitored after parenteral treatment is administered by qualified nurse. Blood pressure, pulse, temperature, respiratory rate and oxypulsemeter as well as any change in skin colour (i.e. cyanosis) should be recorded at regular intervals, as agreed by the multidisciplinary team based on consideration of the patient's history, until the patient becomes active again. The patient's level of hydration should also be assessed²
- 7.2 If it is not possible to physically monitor vital signs, for example if the patient refuses, or it is risk assessed as being too hazardous to attempt, this must be recorded in the patients notes. Visual observations must be maintained of including respiratory rate and skin colour and these must be recorded.
- 7.3 If the patient appears to be or is asleep, more intensive monitoring is required. The same applies to patients where intravenous administration of medication has taken place, BNF limits exceeded, where such patients have used alcohol or illicit drugs or have a relevant medical disorder or concurrently take other medication²
- 7.4 Monitoring of vital signs will be recorded on a standardized recording form (Appendix 1).
- 7.5 Health professionals should understand the importance of maintaining an unobstructed airway²
- 7.6 Health professionals should recognize the importance of nursing, in the recovery position, people who have received these drugs and also of monitoring pulse, blood pressure, respiration and oxygen saturation levels²
- 7.7 Monitoring RT for children and adolescent after RT is the same as in adults⁴
- 7.8 It is good practice to monitor service users vital signs after administering PRN medications.

8.0 Following Incidents of RT

- 8.1 All use of medication determined to be RT must be reported on an accident /incident report form and as an SUI if necessary following the relevant policy's guidance.
- 8.2 A full written account of the incident must be made as soon a possible in the nursing notes detailing why RT was necessary. This should include an outline of the context i.e. precipitants, victim, weapon,

severity, actions taken, outcome, subsequent revisions to management plan

- 8.3 With growing awareness that involuntary procedures produce traumatic reaction in service users, following the use of rapid tranquillisation, service users should be offered the opportunity to discuss their experiences and should be provided with a clear explanation of the decision to use urgent sedation. This should be documented in their notes²
- 8.4 Service users should be given the opportunity to write their account of their experience of RT in their notes²
- 8.5 Following an incident the person in charge at the time, with support from the Modern Matron/Clinical Risk Management Team will ensure that Trust Policy CP3 Serious Untoward Incident (SUI), RM06 Accident/Incidents Policy and CLP 28 Clinical Risk Assessment and Management is carried out this may include:
- Diffusing/Debriefing (informal /formal as appropriate)
 - A multi-disciplinary clinical case review and audit
 - Completion of accident and incident reporting documents
 - Consideration must be given to assessment regarding possible increase in observation status
 - Consideration must be given to nursing within a more secure environment e.g. transfer to PICU
 - Further investigation if necessary as per Trust Policies

9.0 Associated Documents

- Violence - the short term management of disturbed/violent behaviour in in-patient psychiatric settings and emergency departments NICE 2005
- Schizophrenia- Full National Guidelines on core interventions in primary and secondary care". NICE, 2003
- The Independent Inquiry into the Death of David Bennett, 2003
- The Maudsley 2005 Prescribing Guidelines 8th Edition
- Code of Practice to the Mental Health Act 1983 (revised 1999)
- Formulary and Prescribing Guidelines 1st edition SEPT 2005
- CLP6 Advanced Directives Policy
- CLP14 CPR Policy
- CLPG25 Prevention and Management of Violence and Aggression (PMVA) Policy
- Royal College of Psychiatrist Occasional Paper OP41, "Management of Imminent Violence" 1998
- CLP40 Time Out Policy
- CLP41 Seclusion Policy

- The Formulary and Prescribing Guidelines
- RM06 Accident/Incidents Policy
- CP3 Serious Untoward Incident (SUI) Policy
- Criminal Records Bureau (HSC 2002/008)

10.0 Appendices

1. Management of Acutely Disturbed Patients Algorithm for ward laminate with boxed text guidance
2. Standardised form for Recording Vital Signs Monitoring Rapid Tranquilisation

11.0 Procedure Reference Information

1. Violence -the short term management of disturbed/violent behaviour in in-patient psychiatric settings and emergency departments NICE 2005
2. From section 1.5 “Schizophrenia- Full National Guidelines on core interventions in primary and secondary care”. NICE, 2003
3. Royal College of Psychiatrist Occasional Paper OP41, “Management of Imminent Violence “1998
4. The Maudsley 2005 Prescribing Guidelines 8th Edition
5. Formulary and Prescribing Guidelines 1st edition SEPT 2005
6. Independent Enquiry into the Death of David Bennett, December 2003

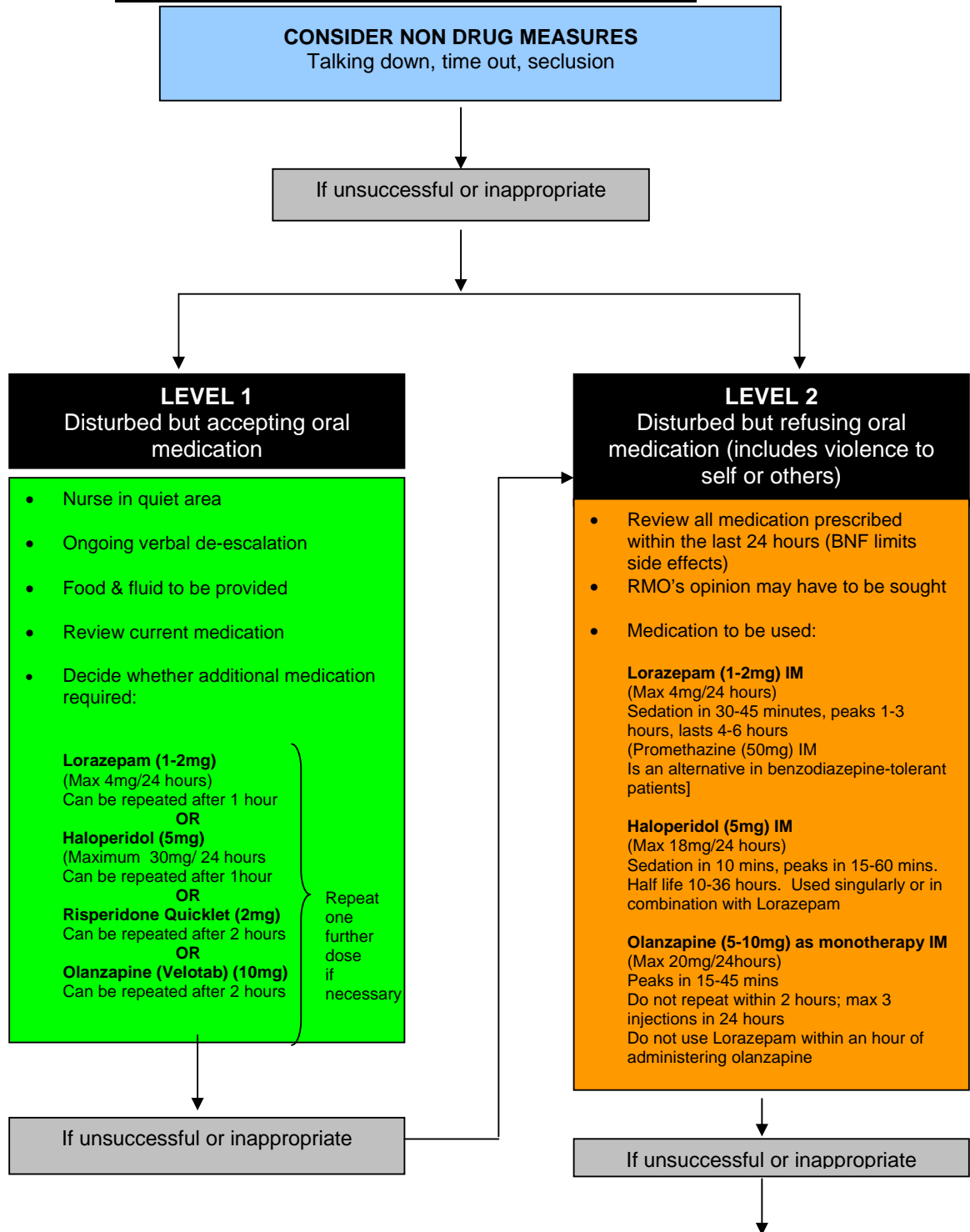
Clinical Procedure No:	CLPG52
Implementation Date:	11.10.2006
Last Review Date:	
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Next Review Date:	01.11.2009
Date Approved by the Executive Team:	11.10.2006
Date Ratified by Board of Directors:	17.10.2006

The Director responsible for monitoring this policy is

The Director of Integrated Governance and Executive Nurse

APPENDIX 1

MANAGEMENT OF ACUTELY DISTURBED PATIENTS



LEVEL 3

- MDT's consultation
- RMO's direct involvement mandatory
- Consult on-call pharmacist
- Second opinion from another consultant
- Promethazine (50mg) IM
- Amylobarbitone (100mg) IM
- Paraldehyde (5-10mg) IM
- Diazepam (10mg) IV over at least 5 mins; can be repeated up to 3 times if insufficient effect. Midazolam IM can be used as an alternative.
- Avoid Amylobarbitone, Paraldehyde, Diazepam if ECT is being considered

Rapid Tranquillisation – Monitoring

After any parenteral drug administration monitor as follows:

- **Temperature**
- **Pulse**
- **Blood Pressure**
- **Respiratory Rate**
- **Level of Hydration**

Every 5-10 minutes for one hour, then half-hourly until patient is ambulatory.

If the patient is asleep or **unconscious**, the use of pulse oximetry to continuously measure oxygen saturation is desirable. A nurse should remain with the patient until they are ambulatory again.

ECG and haematological monitoring are also strongly recommended when parenteral antipsychotics are given, especially when higher doses are used. Hypokalaemia, stress and agitation place the patient at risk of cardiac arrhythmias.

Remedial Measures in Rapid Tranquillisation

Problem	Remedial Measures
Acute dystonia (including oculogyric crises)	Give procyclidine 5-10mg IM or IV or benzatropine 1-2mg IM
Reduced respiratory rate (<10/min) Or oxygen saturation (<90%)	Give oxygen; raise legs; ensure patient is not lying face down. Give flumazenil if benzodiazepine-induced respiratory depression suspected (see protocol). If induced by any other sedative agent: Ventilate mechanically.
Irregular or slow (<50/min) pulse	Refer to specialist medical care immediately.
Fall in blood pressure (>30mmHg orthostatic drop or <50mmHg diastolic)	Lie patient flat , tilt bed towards head. Monitor closely.
Increased temperature	Withhold antipsychotics: (risk of NMS and perhaps arrhythmias). Check creatinine kinase urgently

Guidelines for the Use of Flumazenil	
Indication for use	If, after the administration of lorazepam, respiratory rate falls below 10/minute.
Contra-indications	Patients with epilepsy who have been receiving long-term benzodiazepines.
Caution	Dose should be carefully titrated in hepatic impairment
Dose and route of administration	Initial: 200 mcg intravenously over 15 seconds - if required level of consciousness not achieved after 60 seconds then, Subsequent dose: 100 mcg over 10 seconds
Time before dose can be repeated	60 seconds
Maximum dose	1 mg in 24 hours (one initial dose and eight subsequent doses).
Side effects	Patients may become agitated, anxious or fearful on awakening. Seizures may occur in regular benzodiazepine users.
Management	Side effects usually subside
Monitoring	
<ul style="list-style-type: none"> • What to monitor? • How often? 	<p>Respiratory rate</p> <p>Continuously until respiratory rate returns to baseline level.</p> <p>Flumazenil has a short half life (much shorter than diazepam) and respiratory function may recover then deteriorate again.</p> <p>Note: If respiratory rate does not return to normal or patient is not alert after initial doses given then assume sedation due to some other cause.</p>

Guidelines for the Use of Clopixol Acuphase (zuclopenthixol acetate)

Acuphase should only be used after an acutely psychotic patient has required repeated injections of short-acting antipsychotic drugs such as haloperidol, olanzapine or ziprasidone, or sedative drugs such as lorazepam.

Acuphase should only be given when enough time has elapsed to assess the full response to previously injected drugs: allow 15 minutes after IV injections; 60 minutes after IM.

*Acuphase should **never** be administered:*

- In an attempt to “hasten” the antipsychotic effect of any other antipsychotic therapy
- For rapid tranquillisation
- At the same time as other parenteral antipsychotics or benzodiazepines
- At the same time as depot medication
- As a “test dose” for zuclopenthixol
- To a patient who is physically resistive (risk of intravasation and oil embolus).

*Acuphase should **never** be used for, or in, the following:*

- Patients who accept oral medication
- Patients who are neuroleptic-naïve
- Patients who are sensitive to EPSE
- Patients who are unconscious
- Patients who are pregnant
- Those with hepatitis or renal impairment
- Those with cardiac disease

Onset and duration of action

Sedative effects usually begin to be seen 2 hours after injection and peak after 12 hours. The effects may last for up to 72 hours. Note: Acuphase has no place in rapid tranquillisation: *its action is not rapid.*

Dose

Acuphase should be given in a dose of 50-150mg, up to a maximum of 400mg over a two week period. This maximum duration ensures that a treatment plan is put in place. It does not indicate that there are known harmful effects from more prolonged administration, although such use should be very exceptional. There is no such thing as a “course of acuphase”. The patient should be assessed before each administration.

Injections should be spaced at least 24 hours apart.

Note: Zuclopenthixol acetate is widely misused as a sort of “chemical straightjacket”. In reality, it is a potentially toxic preparation with very little published information to support its use. It is perhaps best reserved for those few patients who have a prior history of good response to Acuphase.

Reference: The South London and Maudsley NHS Trust. 2003 Prescribing Guidelines. 7th Edition.

Appendix 2

Rapid Tranquilization- Monitoring Form	Physical	Sheet number
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1. Record temp, pulse, BP, resp, & level of hydration every 5-10 minutes for 1 hour, then ½ hourly until the patient is ambulatory*
2. If the patient is unconscious, the use of pulse oximetry to continuously measure oxygen saturation is desirable. A nurse should remain with the patient until they are ambulatory again*
3. ECG & haematological monitoring are also strongly recommended when parenteral antipsychotics are given, especially when higher doses are used. Hypokalaemia, stress & agitation place the patient at risk of cardiac arrhythmias*

*Formulary and Prescribing Guidelines 1st edition SEPT 2005

Name of Patient		DOB	
Unit No		Ward	

Date & Time RT was administered		Date & Time physical monitoring was stopped	
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Date & time																			
Temp																			
BP																			
Pulse																			
Resp																			
Level of hydration																			
Pulse oximetry (if used)																			