Rapid tranquillisation (RT) algorithm

This algorithm should be read in conjunction with the recommendations in the guideline and the Summary of Product Characteristics (SPC) chart for rapid tranquillisation, available at www.nice.org.uk/CG025

See also page 15 of this quick reference guide

All staff involved in RT should be trained according to the recommendations set out on pages 21–22

Continue to use de-escalation techniques throughout

Potential risks

- Over-sedation causing loss of consciousness
- Over-sedation causing loss of alertness
- Loss of airway
- Cardiovascular and respiratory collapse
- Interaction with medication (prescribed or illicit)
- Damage to the therapeutic relationship
- Underlying coincidental physical disorders

Caution

Take extra care in presence of:
- Congenital prolonged QTc syndromes
- Medications that lengthen QTc intervals directly or indirectly
- Hypo/hyperthermia, stress/extreme emotions, extreme physical exertion

Consult

Advance directives if available

Preferred method of drug administration (1 = preferred)

1 Oral
- Allow sufficient time for clinical response between doses

Non-psychotic context

Consider oral lorazepam

Psychotic context

Consider oral lorazepam + oral antipsychotic

Consider all medication as part of RT (including pro re nata from agreed RT protocol or advance directive)

2 Intramuscular (i/m)
- Allow sufficient time for clinical response between doses

Non-psychotic context

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

Consider i/m lorazepam (if oral route inappropriate)

Service users should be able to respond to communication throughout
- Prescribe oral and i/m doses separately
- Don’t use o/i/m abbreviation
- Don’t use two drugs of same class for RT
- Don’t mix medications in same syringe

Prescribers and those who administer medicines should be familiar with:
- the properties of benzodiazepines; flumazenil; antipsychotics; antimuscarinics and antihistamines
- risks (including cardio-respiratory effects, particularly if with high arousal, possible drug misuse, dehydration or physical illness)
- the need to titrate doses to effect
- Prescriber and medication administrator should pay attention to:
  - the total dose prescribed
  - arrangements for review
  - consent, British National Formulary (BNF) and SPC requirements, physical and mental status

There are specific risks with different classes of medication. Risks may be compounded if used in combination.

Benzodiazepines: loss of consciousness; respiratory depression or arrest; cardiovascular collapse when receiving both clozapine and benzodiazepines

Antipsychotics: loss of consciousness, cardiovascular/respiratory complications and collapse; seizures; akathisia; dystonia; dyskinesia; neuroleptic malignant syndrome; excessive sedation

Antihistamines: excessive sedation; painful injection; additional antimuscarinic effects

Consult Preferred method of drug administration (1 = preferred)

1 Oral
- Allow sufficient time for clinical response between doses

Non-psychotic context

Consider oral lorazepam

Psychotic context

Consider oral lorazepam + oral antipsychotic

Consider all medication as part of RT (including pro re nata from agreed RT protocol or advance directive)

2 Intramuscular (i/m)
- Allow sufficient time for clinical response between doses

Non-psychotic context

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

Consider i/m lorazepam (if oral route inappropriate)
Interventions for the management of disturbed/violent behaviour

- Transfer to oral route at earliest opportunity

**NICE Guideline: quick reference guide – Violence**

Psychotic context

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

Consider i/m lorazepam + i/m haloperidol

May also consider i/m olanzapine for moderate disturbance

Don’t give i/m lorazepam within 1 hour of i/m olanzapine. Use oral lorazepam with caution

*The manufacturer has issued a warning that use outside of the details contained within the SPC may increase the risk of fatality

When using haloperidol:
- procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
- Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

When transferring a service user between units, the following should also be sent:
- a full medication history (including the service user’s response to medications) and any adverse effects
- an advance directive
- the service user’s account of their experience (where possible)
- On discharge, file all such information in their healthcare record to be reviewed regularly.

3 Intravenous (i/v)
(Exceptional circumstances only)

Immediate tranquillisation essential

Consider i/v benzodiazepines or haloperidol

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

**Zuclopenthixol acetate**

- Not recommended for RT due to long onset and duration of action, but may be considered as an option when:
  - service user will be disturbed/violent over extended time period
  - past history of good/timely response
  - past history of repeated parenteral administration
  - cited in an advance directive
  - Never administer to those without previous antipsychotic exposure
  - Consult BNF and manufacturer’s SPC regarding its use

**Zuclopenthixol acetate is commonly known as ‘acuphase’ by staff and service users**

After RT

- Monitor vital signs
- Record blood pressure, pulse, temperature, respiratory rate and hydration at intervals agreed by multidisciplinary team until service user active again
- Pulse oximeters should be available

Intensive and frequent monitoring by trained staff required if:
- service user is/appears sedated/asleep
- i/v administration used
- BNf limit or SPC exceeded
- in high-risk situations
- illicit substances/alcohol ingested
- presence of relevant medical disorder/taking prescribed medication
- Pay particular attention to respiratory effort, airway and level of consciousness
- Record in care plan

If verbal responsiveness is lost:
- use level of care as for general anaesthesia

Post-incident review within 72 hours

**Drugs NOT recommended for RT**

- Oral or i/m chlorpromazine
- i/m diazepam
- Thoridizine
- i/m depot antipsychotics
- Olanzapine (dementia-related disturbance)
- Risperidone (dementia-related disturbance)

**Zuclopenthixol acetate**

- Oral therapy is:
  - refused or has failed
  - not indicated by previous clinical response
  - not a proportionate response

**BNF limit or SPC exceeded**

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

- Be aware of symptoms of:
  - respiratory depression
  - dystonia
  - cardiovascular compromise
  - Crash bag must be available within 3 mins
  - Staff must be trained to Immediate Life Support (ILS)
  - Never leave service user unattended

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

- If verbal responsiveness is lost:
  - use level of care as for general anaesthesia

- Post-incident review within 72 hours

- When transferring a service user between units, the following should also be sent:
  - a full medication history (including the service user’s response to medications) and any adverse effects
  - an advance directive
  - the service user’s account of their experience (where possible)
  - On discharge, file all such information in their healthcare record to be reviewed regularly.

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

**When transferring a service user between units, the following should also be sent:**

- a full medication history (including the service user’s response to medications) and any adverse effects
- an advance directive
- the service user’s account of their experience (where possible)
- On discharge, file all such information in their healthcare record to be reviewed regularly.

**Drugs NOT recommended for RT**

- Oral or i/m chlorpromazine
- i/m diazepam
- Thoridizine
- i/m depot antipsychotics
- Olanzapine (dementia-related disturbance)
- Risperidone (dementia-related disturbance)

**Zuclopenthixol acetate**

- Oral therapy is:
  - refused or has failed
  - not indicated by previous clinical response
  - not a proportionate response

**BNF limit or SPC exceeded**

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

- Be aware of symptoms of:
  - respiratory depression
  - dystonia
  - cardiovascular compromise
  - Crash bag must be available within 3 mins
  - Staff must be trained to Immediate Life Support (ILS)
  - Never leave service user unattended

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

- If verbal responsiveness is lost:
  - use level of care as for general anaesthesia

- Post-incident review within 72 hours

- When transferring a service user between units, the following should also be sent:
  - a full medication history (including the service user’s response to medications) and any adverse effects
  - an advance directive
  - the service user’s account of their experience (where possible)
  - On discharge, file all such information in their healthcare record to be reviewed regularly.

**Drugs NOT recommended for RT**

- Oral or i/m chlorpromazine
- i/m diazepam
- Thoridizine
- i/m depot antipsychotics
- Olanzapine (dementia-related disturbance)
- Risperidone (dementia-related disturbance)

**Zuclopenthixol acetate**

- Oral therapy is:
  - refused or has failed
  - not indicated by previous clinical response
  - not a proportionate response

**BNF limit or SPC exceeded**

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

- Be aware of symptoms of:
  - respiratory depression
  - dystonia
  - cardiovascular compromise
  - Crash bag must be available within 3 mins
  - Staff must be trained to Immediate Life Support (ILS)
  - Never leave service user unattended

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

- If verbal responsiveness is lost:
  - use level of care as for general anaesthesia

- Post-incident review within 72 hours

- When transferring a service user between units, the following should also be sent:
  - a full medication history (including the service user’s response to medications) and any adverse effects
  - an advance directive
  - the service user’s account of their experience (where possible)
  - On discharge, file all such information in their healthcare record to be reviewed regularly.

**Drugs NOT recommended for RT**

- Oral or i/m chlorpromazine
- i/m diazepam
- Thoridizine
- i/m depot antipsychotics
- Olanzapine (dementia-related disturbance)
- Risperidone (dementia-related disturbance)

**Zuclopenthixol acetate**

- Oral therapy is:
  - refused or has failed
  - not indicated by previous clinical response
  - not a proportionate response

**BNF limit or SPC exceeded**

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

- Be aware of symptoms of:
  - respiratory depression
  - dystonia
  - cardiovascular compromise
  - Crash bag must be available within 3 mins
  - Staff must be trained to Immediate Life Support (ILS)
  - Never leave service user unattended

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

- If verbal responsiveness is lost:
  - use level of care as for general anaesthesia

- Post-incident review within 72 hours

- When transferring a service user between units, the following should also be sent:
  - a full medication history (including the service user’s response to medications) and any adverse effects
  - an advance directive
  - the service user’s account of their experience (where possible)
  - On discharge, file all such information in their healthcare record to be reviewed regularly.

**Drugs NOT recommended for RT**

- Oral or i/m chlorpromazine
- i/m diazepam
- Thoridizine
- i/m depot antipsychotics
- Olanzapine (dementia-related disturbance)
- Risperidone (dementia-related disturbance)

**Zuclopenthixol acetate**

- Oral therapy is:
  - refused or has failed
  - not indicated by previous clinical response
  - not a proportionate response

**BNF limit or SPC exceeded**

- When using haloperidol:
  - procyclidine or benzatropine should be immediately available to reduce risk of dystonia or other extrapyramidal side-effects
  - Give procyclidine or benzatropine i/m or i/v as manufacturer’s instruction

- Be aware of symptoms of:
  - respiratory depression
  - dystonia
  - cardiovascular compromise
  - Crash bag must be available within 3 mins
  - Staff must be trained to Immediate Life Support (ILS)
  - Never leave service user unattended

Oral therapy is:
- refused or has failed
- not indicated by previous clinical response
- not a proportionate response

- Decision to use not to be made by junior staff in isolation
- Specify and record circumstances for use

- If verbal responsiveness is lost:
  - use level of care as for general anaesthesia

- Post-incident review within 72 hours

- When transferring a service user between units, the following should also be sent:
  - a full medication history (including the service user’s response to medications) and any adverse effects
  - an advance directive
  - the service user’s account of their experience (where possible)
  - On discharge, file all such information in their healthcare record to be reviewed regularly.