

Management of the acutely agitated patient at RACH

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To skip straight to pharmacological management, click [here](#) for oral and [here](#) for IM

In larger adolescents where adult doses are felt to be necessary, refer to the [CAMHS rapid tranquilisation pathway](#) (page 20)

Background

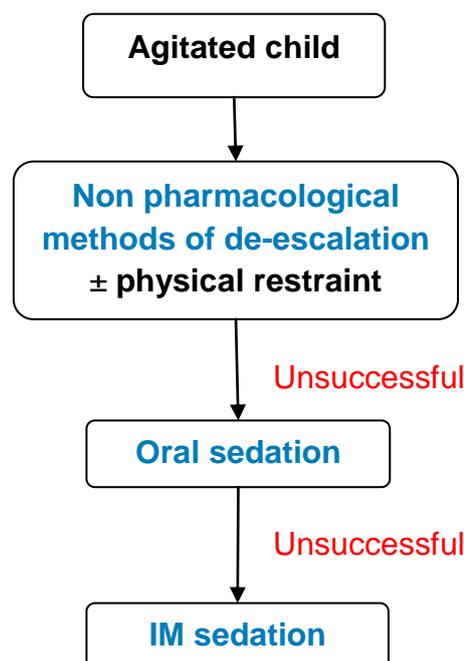
- Agitation can be a manifestation of both an organic disease and of mental illness.
- This guidance provides information on the rapid tranquillisation of an agitated patient to reduce the risk of harm to the patient and those around them.
- Remember that if a patient is “acting up” they can be removed from the ED to a more appropriate location e.g. home, police

Assessment and Management

Make sure that you and the patient are safe. Have a low threshold to having a security presence. Consider your posture, positioning, and exit points.

If there are any concerns with regards to a patient carrying weapon of any sort inform security and / or the police immediately

Police can and should attend when requested even if security staff are present, particularly if staff or patients are assaulted or at risk of assault.



Non-pharmacological Management

- Listen and talk in a calm manner. Try to talk them “down”
- Provide a safe and comfortable environment for the patient
- Try to involve parent / carer to calm the patient
- Involve mental health staff early – contact the RACH CAMHS Liaison service
- Try to agree collaborative treatment such as oral sedation
- Ask for early support from security staff if patient is posing a risk to themselves or others

Restraint

Patient autonomy is paramount and should be preserved if possible. Physical restraint should be a last resort after other methods of de-escalation have been exhausted.

Restraint should only be carried out by trained personnel i.e. security staff.

Pharmacological Management

- Benzodiazepines are generally the first medication of choice.
- If ineffective, repeat the medication at the same dose (bear in mind maximum dose).
- If response to the second dose is poor, try a different medication.
- **IV therapy is not indicated in this situation**
- Drugs that are not available in the CED can usually be obtained from the emergency drug cupboard or the RSCH ED. In doubt, contact the on call Pharmacist.

Cautions & Contraindications

When prescribing sedation be aware of concomitant therapeutic and recreational drug use. Ensure you have post sedation monitoring set up

Oral Medication:-

Allow **at least one hour** for oral medication to work before repeating dose in a stable situation. If situation escalates, move on to IM medication rather than repeating dose.

Drugs and doses:

Lorazepam	<12 years	0.5 – 1 mg	Max 4 mg per dose
	>12 years	1 – 4 mg	Max 4 mg per dose

If lorazepam not available	Midazolam	all ages	0.5 mg / kg (max 20 mg)
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OR

Promethazine	2 – 4 years	15 – 20 mg	Max 15 mg / day
	5 – 9 years	20 – 25 mg	Max 25 mg / day
	10 – 17 years	25 – 50 mg	Max 50 mg / day

+/- if extreme agitation or psychosis

Olanzapine (oro-dispersible)	<12 years	N/A	Max 20 mg daily
	>12 years	5 mg	

IM Medication:-

IM medication should only be used when:

- a patient cannot be convinced, or it is not safe to take oral medication
- the situation requires expedited sedation of an agitated patient

If using IM sedation, ensure that a Consultant Paediatrician (CED or COW depending on location of the child) + / - Consultant Psychiatrist is aware / present.

In severely agitated patients where chemical restraint is necessary because of immediate safety risks to the patient, other patients or staff, call 222 and request the paediatric medical emergency team for consideration of RSI.

Drugs and doses:

Lorazepam <small>Mix 1:1 with water for injections</small>	<12 years	0.5 – 1 mg	Max 4 mg per dose	
	>12 years	1 – 2 mg		
If lorazepam not available		Midazolam	all ages	0.1 – 0.2 mg / kg (max 10 mg)

OR

Promethazine	<12 years	0.5 – 1 mg / kg	Max 25 mg per dose; Max 50 mg / day Max 50 mg / day	
	>12 years	25 - 50 mg		

+/- if extreme agitation or psychosis

Haloperidol	All ages	0.1 – 0.2 mg / kg	Max 5 mg / dose, usually 0.5 mg – 5 mg. Max 6 mg per day	
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OR

Olanzapine <small>Mix with 2.1 ml water for injections</small>	<12 years	N/A	Max 20 mg per day	
	>12 years	2.5 – 5 mg		

Allow **30 minutes** for lorazepam and promethazine to work before giving a second dose. If some effect from lorazepam is seen, repeat at the same dose. If no effect or paradoxical agitation is seen, give promethazine instead of second dose of lorazepam. If both lorazepam and promethazine fails to improve agitation, an anti-psychotic drug can be considered after at least 45 minutes.

In adults, haloperidol and promethazine can be given together (usually only in the context of psychotic illness).

A repeated dose of olanzapine **may only be given 2 hours after the first dose**. Lorazepam and olanzapine must be given **at least 1 hour apart** due to the risk of hypotension.

Adverse effects and antidotes:

Drug	Adverse effects	Antidote
Midazolam	Respiratory depression and airway compromise (unlikely to see immediate complications with oral as longer half lives) and paradoxical reactions	Flumazenil - 10 micrograms/kg (Max 200micrograms/dose) repeated at 1 minute intervals prn for up to 5 doses, for reversal of respiratory depression associated with benzodiazepines only. Do not give unless you are sure the patient is not on long term benzodiazepines.
Lorazepam		
Promethazine	Antimuscarinic effects (dry mouth, blurred vision, urinary retention). Rarely hypotension, arrhythmias, extrapyramidal reactions.	No antidote
Olanzapine	Respiratory depression, hypotension, ↑HR. Do not use if history suggestive of prolonged QTC, Extra-pyramidal reactions, Neuroleptic Malignant Syndrome, may reduce seizure threshold	Procyclidine - given IV or IM for reversal of dystonic reactions associated with haloperidol and olanzapine. Repeated doses may be required.
Haloperidol		

Lorazepam (oral and I.M) is unlicensed for use in <12 years old
Olanzapine (oral and I.M) is unlicensed for use in <18 years old.

Post Sedation Care

Monitoring needs to occur in a safe environment within the clinical setting and should include the assessment of airway patency, respiratory depression, hypotension and extrapyramidal reactions.

- Calm and alert patient:-
 - 30 min observations for 2 hours after last sedative
- Patient with a reduced level of consciousness:-
 - One to one nursing in resus
 - Continuous SpO₂ monitoring
 - Vital signs and GCS assessed every 15 minute until stability is established clinically
- Agitated patients need continuous clinical monitoring

Admission to ward

Most patients who receive sedation for agitation / psychiatric disturbance will require admission to level 9.

- Liaise with CoW / Consultant Psychiatrist on call, and bleep holder to arrange appropriate nursing level of acuity.