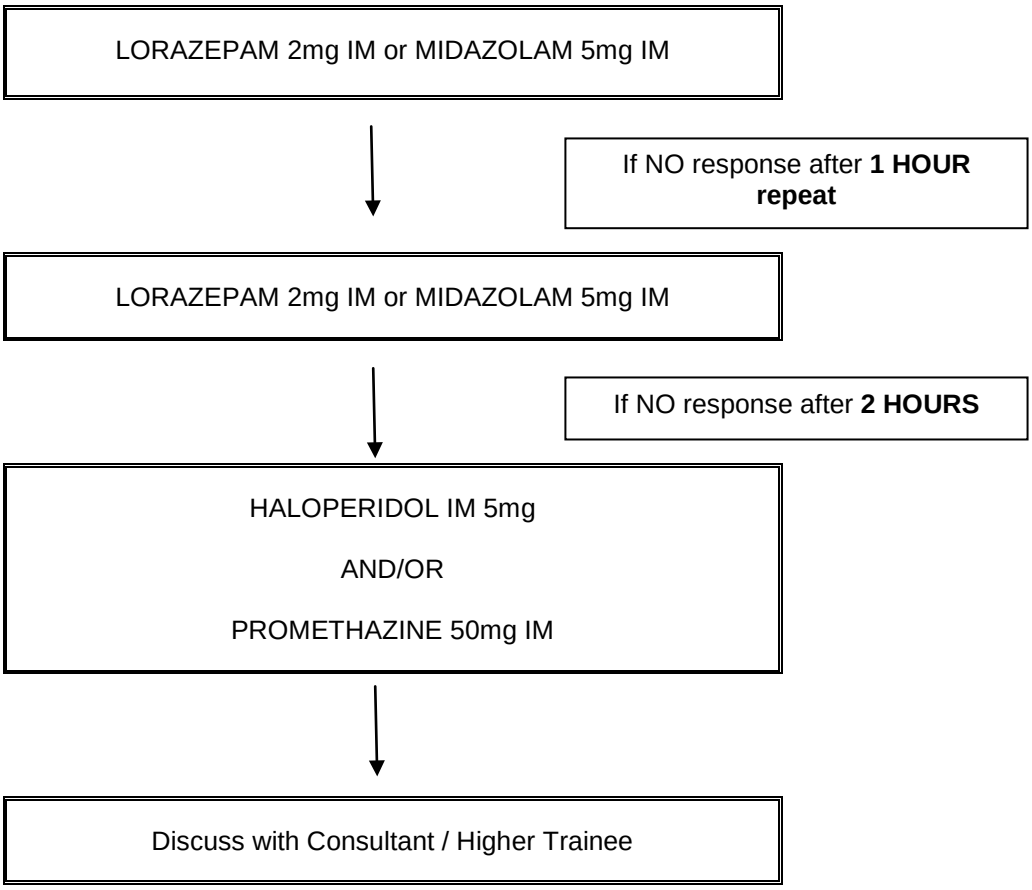
INTRAMUSCULAR (IM) DRUG TREATMENT OF ACUTE BEHAVIOURAL DISTURBANCE
ADULT (18-65 YRS) PSYCHIATRIC IN-PATIENTS
(use in conjunction with notes overleaf)



Notes

- As per Summary of Product Characteristics for haloperidol injection a baseline ECG is recommended before intramuscular dosing. During therapy, the need for ECG monitoring for QTc interval prolongation and for ventricular arrhythmias must be assessed in all patients, but continuous ECG monitoring is recommended for repeated intramuscular doses. If an ECG cannot be obtained the reason for this must be clearly documented in the patient record.
- Monitor temperature, pulse, blood pressure and respiratory rate every 10 minutes for the first hour, then half hourly until patient is ambulatory.
- If monitoring of vital signs is not possible observe for signs/symptoms of pyrexia, hypertension, over-sedation and general physical well-being.
- Resuscitation facilities must be available as per local guidelines.
- Question cause of behaviour if no response to repeated doses. The use of other guidelines may be appropriate e.g. alcohol detoxification. Seek senior advice if use of New Psychoactive Substances is suspected. Consider referral to anaesthesiologist for specialist advice.

Pharmacokinetics of IM medication

Drug	Time to Peak Concentration (Tmax)	Elimination Half Life ($T_{1/2}$)
Haloperidol	20 minutes	20 hours
Lorazepam	60-90 minutes	12-16 hours
Midazolam	30 minutes	2 hours
Promethazine	2-3 hours	5-14 hours

Authors: NHS Lothian Acute Behavioural Disturbance Working Group
Category 2 GUIDELINE
Version: 2
Status: FINAL
Authorised by: NHS Lothian Hospital & Specialist Services Medicines Committee
Date of Authorisation: Jan 2019
Review Date: Jan 2022
Date added to Intranet: Jan 2019
Key Words: acute behavioural disturbance, rapid tranquilisation, IM medication

GUIDANCE ON THE DRUG TREATMENT OF ACUTE BEHAVIOURAL DISTURBANCE
ADULT (18 – 65YRS) PSYCHIATRIC IN-PATIENTS

This algorithm is a good practice guideline for the use of intramuscular (IM) medication to treat acute behavioural disturbance developed by multidisciplinary staff in NHS Lothian. It recognises that rapid tranquillisation is an urgent situation and IM medication is necessary when the oral route is not possible or appropriate.

Choice of treatment

A benzodiazepine is always recommended as first line of treatment. Be aware of risk of, or any previous history of, paradoxical disinhibition with use of benzodiazepines. Consider use of haloperidol after one hour if the patient is displaying psychotic symptoms.

A baseline ECG is recommended for **all** patients prior to administration of haloperidol. Each prescriber must make his/her own judgement on prescribing based on the risks and benefits for the individual patient.

Olanzapine 10mg IM is an alternative in patients who have known acute dystonic sensitivity to haloperidol. It must not be given with a benzodiazepine. Information on administration and dosing can be obtained from REH clinical pharmacy service.

A maximum of lorazepam 4mg/midazolam 10mg, (i.e. 2 doses) and haloperidol 5mg and/or promethazine 50mg (i.e. 1 dose) may be given before the advice of a consultant or higher trainee is sought. The indication on the patient's prescription and administration record must always be "rapid tranquillisation". See below for sample prescribing.

Completion of the relevant Mental Health Act (MHA) documentation (consent to treatment certificate T3/T4) is required if IM medication is to be administered. If prescribed for patients who are not detained under an order authorising treatment e.g. informal patients, there must be a clear and detailed rationale documented in the notes. This must include a statement on the patient's capacity to consent to treatment. For these patients IM medication should only be prescribed as a once only dose on the front of the prescription and administration record and discuss with an approved medical practitioner (AMP) regarding requirement for detention under the MHA.

The use of IM medication may increase total daily antipsychotic dose above BNF maximum. Refer to NHS Lothian 'Guidelines for use of High Dose Antipsychotic Medication' for further advice.

	Medicine **PROMETHAZINE**		Indication **RAPID TRANQUILISATION**		Date													
	Dose **50mg**	Route **IM**	Frequency **ONCE**	Max in 24h **50mg**	Time													
	Prescriber sign + print **A. DOCTOR**		Date **01/01/16**	Pharmacy	Dose													
	Additional Information **3rd line treatment**		Stop date & initials		Given by													

	Medicine **LORAZEPAM**		Indication **RAPID TRANQUILISATION**		Date													
	Dose **2mg**	Route **IM**	Frequency **1O**	Max in 24h **4mg**	Time													
	Prescriber sign + print **A. DOCTOR**		Date **01/01/16**	Pharmacy	Dose													
	Additional Information **1st line treatment**		Stop date & initials		Given by													

	Medicine **HALOPERIDOL**		Indication **RAPID TRANQUILISATION**		Date													
	Dose **5mg**	Route **IM**	Frequency **ONCE**	Max in 24h **5mg**	Time													
	Prescriber sign + print **A. DOCTOR**		Date **01/01/16**	Pharmacy	Dose													
	Additional Information **2nd line treatment**		Stop date & initials		Given by													

Management of problems resulting from the use of IM medication

Problem	Remedial Measure
Acute dystonic reaction	Procyclidine 5mg IM, repeat after 20 mins if necessary, maximum 20mg daily
Orthostatic hypotension	Lie patient flat, raise legs, monitor closely including regular BP measurement
Reduced respiratory rate (<10/minute or O2 staturation <90%)	Give oxygen. Give flumazenil if benzodiazepine induced. Initially 200micrograms IV over 15 seconds, then 100 micrograms at 60 second intervals if required. Maximum 1mg in 24 hours.
Abnormal physical observations	Continue to monitor regularly as per guideline. Record on NEWS chart and follow instructions with regard to seeking medical assistance. Consider risk of Neuroleptic Malignant Syndrome and arrhythmias in patients with a raised temperature.

Authors: NHS Lothian Acute Behavioural Disturbance Working Group
Category 2 GUIDELINE
Version: 2
Status: FINAL
Authorised by: NHS Lothian Hospital & Specialist Services Medicines Committee
Date of Authorisation: Jan 2019
Review Date: Jan 2022
Date added to Intranet: Jan 2019
Key Words: acute behavioural disturbance, rapid tranquilisation, IM medication