Clinical scenario

A 30-year-old woman with a new history of acute disturbance has been admitted to the A&E ward. No diagnosis yet. Unable to do observations due to agitation.

Medicine chart
- Lorazepam 1-2mg PO PRN (up to 4mg/day, including IM)
- Lorazepam 1-2mg IM PRN (up to 4mg/day, including PO)
- Haloperidol 5-10mg PO PRN (up to 20mg/day including IM)
- Haloperidol 5-10mg IM PRN (up to 20mg/day including PO)
- Procyclidine 5mg IM PRN (up to 15mg/day)

The patient is refusing oral medication, had haloperidol 2 hours ago but has not had any response. She also is complaining of a locked jaw (dystonia) and was given IM 5mg procyclidine which treated the dystonia.

The patient is starting to become agitated again. The nursing staff ask can IM haloperidol be given again but with IM procyclidine to avoid another dystonia?

Clinical scenario

- What questions do you need to ask?
- Is haloperidol IM the right choice?
- What do you need to monitor?

SmBARD

- **Situation**
  - Where
  - Who - patient
  - Current presentation/concern
- **Medicines**
  - Review doses, current treatment, recently started or stopped.
- **Background**
  - Patient's reason for situation (drugs/alcohol)
  - Significant medical history
    - admitting diagnosis, date of admission, prior procedures, current medications, allergies, pertinent laboratory results and other relevant diagnostic results. For this, you need to have collected information from the patient's chart, flow sheets and progress notes.
- **Assessment**
  - Vital signs
  - Clinical impressions, concerns
- **Recommendation/s**
  - Explain what you need – be specific about request and time frame
  - Make/discuss suggestions
  - Clarify expectations
- **Decision**

Unknown history

- Drug induced?
- Alcohol?
- NMDA or K channels antibodies?
- Guidance = lorazepam (caution with alcohol)

Haloperidol

- Max IM dose = 5mg
- Max licenced daily dose is 15mg but can give up to 20mg (most trust have 12mg)
- Bioavailability 60-70% not equally doses
- Should be given with promethazine or lorazepam (Ostinelli)
- ECG?
- Responded to the first? If there is a partial response to intramuscular haloperidol combined with intramuscular promethazine, consider a further dose.

Procyclidine

- No data to give with haloperidol (prophylaxis)
- Cognition and anticholinergic effects
- Tmax unknown but works within 10mins
- Half life is 12 hours so may wear off
- Review the haloperidol

Medicine	Route	Onset of effect	Time to peak effect	Bioavailability	Duration of action	Elimination half life
Aripiprazole	Oral	NR	3-5 hours	87%	18-24 hours	75-146 hours
	IM	30-45 mins	1-3 hours	100%		
Diazepam	Oral	NR	30-90mins	76%	12-24hours	1-5 days (biphasic)
	IV	5-10 seconds	<1 min	100%		12-24 hours
Haloperidol	Oral	1-2 hours	2-6 hours	60-70%	18-24hours	13-40 hours
	IM	15-30 mins	20 mins	100%		
	IV	seconds/minutes	seconds/minutes	100%		
Lorazepam	Oral	20-30 mins	2 hours	100%	6-8hours	12 -16 hours
	IM	15-30 mins	60-90 mins	100%		
Midazolam	Buccal	NR	30 mins	75%	? Few hours	30mins – 3.5hours
	IM	<15 mins	30 mins	100%		4 hours
Olanzapine	Oral	≈ 2 hours	5-8 hours	None	24 hours	31-52 hours
	IM	15-30 mins	15-45 mins			
	IV	5-10 mins	seconds/minutes			
Promethazine	Oral	≈ 2 hours (15-30 mins)	2-3 hours	None	2-8 hours	5-14 hours
	IM	30-60 mins	1-2 hours			

Monitoring

Level	Criteria	Physical monitoring schedule	Suggested minimum psychiatric observations
High	All patients post IM RT, who are over-sedated, asleep, or significantly physically unwell	NEWS or equivalent every 15 minutes for minimum 1 hour and include pulse oximetry until patient is ambulatory	Continuous (within line of sight)
Critical	All patients post IV RT as well as patients who are unconscious (not rousable) or severely physically unwell	Continuous monitoring and resuscitation facilities are essential	Continuous (within arm's length)

- Non contact

NEWS2 RT PROTOCOL- PHYSICAL HEALTH OBSERVATIONS

NEWS key	FULL NAME	
0 1 2 3	DATE OF BIRTH	DATE OF ADMISSION

Frequency: EVERY 15 MINUTES, FOR AT LEAST ONE HOUR. Further monitoring beyond 1 hour should be considered if deemed clinically appropriate (scoring is **above 3** for single parameter or **total above 4**).

If you are unable to carry out Physical Health observations, or the patient refuses you must complete Non-Contact Observations of respiratory rate and level of consciousness using AVPU and record these on this chart.

		DATE / TIME			DATE / TIME
A+B Respirations	≥25		3		≥25
	21–24		2		21–24
	16–20				16–20
	15–17				15–17
	12–14				12–14
	9–11		1		9–11
	≤8		3		≤8
A+B SpO_2 Scale 1	≥96				≥96
	94–95		1		94–95
	92–93		2		92–93
	≤91		3		≤91
SpO_2 Scale 2*	≥97 on O_2		3		≥97 on O_2
	95–96 on O_2		2		95–96 on O_2
	93–94 on O_2		1		93–94 on O_2
	≥93 on air				≥93 on air
	88–92				88–92
	86–87		1		86–87
	84–85		2		84–85
	≤83%		3		≤83%
Air or oxygen?	Air/Air				Air/Air
	O_2 L/min		2		O_2 L/min
	Device				Device
C Blood pressure	≥220		3		≥220
	201–219				201–219
	181–200				181–200
	161–180				161–180
	141–160				141–160
	121–140				121–140
	111–120				111–120
	101–110		1		101–110
	91–100		2		91–100
	81–90		3		81–90
	71–80				71–80
	61–70				61–70
	51–60				51–60
	≤50				≤50
C Pulse	≥131		3		≥131
	121–130		2		121–130
	111–120				111–120
	101–110		1		101–110
	91–100				91–100
	81–90				81–90
	71–80				71–80
	61–70				61–70
	51–60				51–60
	41–50		1		41–50
	31–40		2		31–40
	≤30				≤30
D Consciousness	Alert				Alert
	Confusion		3		Confusion
	V				V
	P				P
	U				U
E Temperature °C	≥39.1°		2		≥39.1°
	38.1–39.0°		1		38.1–39.0°
	37.1–38.0°				37.1–38.0°
	36.1–37.0°				36.1–37.0°
	35.1–36.0°		1		35.1–36.0°
	≤35.0°		3		≤35.0°
NEWS TOTAL					TOTAL
Monitoring frequency					Monitoring
Escalation of care Y/N					Escalation
Initials					Initials

CMHP College of Mental Health Pharmacy

national association