

Delirium Management Guidelines - COVID 19

STEP 1: Confirm Diagnosis

Those infected with COVID-19 may present with or develop delirium. Assess regularly

1. Symptoms

- A. Disturbance in attention or ability to focus and awareness
- B. Acute onset with a change from baseline tending to fluctuate over the course of a day
- C. Cognitive disturbance (memory, disorientation, language, perception including hallucinations)
- D. Symptoms not better explained by pre-existing or evolving neurocognitive disorder (e.g. dementia)
- E. Evidence from history, examination or investigations of a direct causative factor

2. Review notes and drug charts

3. Ensure appropriate investigations have been completed

- 4. Substance intoxication delirium should be considered when symptoms warrant clinical attention, consider discussing with the substance misuse liaison team

STEP 2: Risk Assessment

- Cognitive assessment. Use a standard and culturally appropriate tool - 4AT www.the4AT.com, MMSE, MOCA, CAM, Clock drawing
- Assess mental capacity for participation in treatment. Involve next of kin if needed
- Assess patient and staff-related factors that may lead to non-compliance
- Assess agitation & restlessness

STEP 3: Management

- Medications
- Environmental
- Psychological/behavioural
- General

Medications

- Medications are reserved for delirium with agitation
- **Psychotropic medications can have major drug interactions with potential COVID-19 and many other drugs. Check for potential interactions, e.g., <https://reference.medscape.com/drug-interactionchecker> or <http://www.covid19-druginteractions.org/>**
- Start with low dose lorazepam and increase dose and frequency slowly if needed. Prescribe flumazenil if needed.
- Switch to or add a low dose antipsychotic (see table below) in hyperactive delirium
- May use low dose lorazepam and/or an antipsychotic on PRN basis
- Avoid polypharmacy and monitor for medication side effects
- Avoid long-acting benzodiazepines
- Use low doses in the elderly (around half that of the daily dose of adults) and those with multiple medical problems
- Get baseline ECG to monitor QTc in high-risk situations
- Monitor for akathisia, a potential side effect of antipsychotics that can mimic or add to agitation

Medication	Dose range (mg)	Daily frequency range	Maximum adult dose in 24 hours
Lorazepam	0.25 - 1	4 times a day	4 mg
Quetiapine	12.5 - 50	2-4 times / day	300 mg
Olanzapine	1.25 - 5	2-4 times / day	10 mg
Risperidone	0.25 - 1	2-4 times / day	3 mg
Haloperidol	0.5 - 1	2-4 times / day	5 mg

If no improvement over 4 days, review diagnosis

Continue to treat underlying medical condition(s)

Do not overlook common causes of delirium, e.g., constipation, dehydration, urinary tract infection, pain, medication side effects

Environmental

- Consider nursing in a cubicle
- Offer 1-to-1 nursing and aim for staff continuity
- Use environmental clues (clock, calendar, newspaper, television, etc) to aid orientation
- Ensure adequate lighting and put sign on toilet
- Use help of familiar faces when allowed/possible
- Improve mobility

Psychological

- Breakdown complicated tasks
- Acknowledge distress / validation of feelings
- Frequently and politely orientate the patient
- Ensure use of sensory aids (hearing & visual aids)
- Inform, educate and counsel the family
- Do not confront false beliefs (illusions, delusions)
- Offer reassurance and foster independence

General Management

- Perform physical examination and investigations for assessment and management
- Ensure optimal pain management
- Get the person's attention before communicating
- Ensure proper hydration and nutrition
- Provide a calm and comfortable environment
- Provide sufficient space
- Interact regularly as tolerated by the patient.
- Assist in establishing a regular day-night cycle
- Allow plenty of time when assisting the patient
- Address any unmet needs (constipation, hydration, room temperature control, discomfort)

Contact: For under 65 years of age
Dept. of Liaison Psychiatry, UHW, Cardiff
Telephone: 02920743940 Fax: 02920743928

Contact: For 65 and over
Liaison Psychiatry for Older People
Tele: 02920742093 Fax: 02920 742105

Drug interactions between commonly used medications in delirium and COVID- 19 drugs

	ATV	LPV/r	RDV	FAVI	CLQ	HCLQ	NITAZ	RBV	TCZ
Aripiprazole	↑	↑	↔	↔	↔	↔	↔	↔	↔
Haloperidol	↑♥	↑♥	↔	↔	↔♥	↔♥	↔	↔	↔
Olanzapine	↔	↓	↔	↔	↔	↔	↔	↔	↔
Quetiapine	↑♥	↑♥	↔	↔	↔♥	↔♥	↔	↔	↔
Risperidone	↑♥	↑♥	↔	↔	↑♥	↑♥	↔	↔	↔

Diazepam	↑	↑	↔	↔	↔	↔	↔	↔	↔
Lorazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Midazolam (oral)	↑	↑	↔	↔	↔	↔	↔	↔	↔
Midazolam (parenteral)	↑	↑	↔	↔	↔	↔	↔	↔	↔
Oxazepam	↔	↔	↔	↔	↔	↔	↔	↔	↔
Zaleplon	↑	↑	↔	↔	↔	↔	↔	↔	↔
Zolpidem	↑	↑	↔	↔	↔	↔	↔	↔	↔
Zopiclone	↑	↑	↔	↔	↔	↔	↔	↔	↔

Key to abbreviations

ATV	Atazanavir	CLQ	Chloroquine
LPV/r	Lopinavir/ritonavir	HCLQ	Hydroxychloroquine
RDV	Remdesivir	NITAZ	Nitazoxanide
FAVI	Favipiravir	RBV	Ribavirin
		TCZ	Tocilizumab

Colour Legend

Red	These drugs should not be co-administered
Orange	Potential interaction which may require a dose adjustment or close monitoring.
Yellow	Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment unlikely to be required.
Green	No clinically significant interaction expected

Text Legend

- ↑ Potential increased exposure of the co-medication
- ↓ Potential decreased exposure of the co-medication
- ↑↑ Potential increased exposure of COVID drug
- ↓↓ Potential decreased exposure of COVID drug
- ↔ No significant effect
- ♥ One or both drugs may cause QT and/or PR prolongation. ECG monitoring is advised if co-administered.

This guidance may be amended following further national guidance and development of evidence base.

References:

Liverpool Drug Interactions Group

For up to date information www.covid19-druginteractions.org

Compiled by:

**Professor Tayyeb Tahir
Dr Ankit Saxena
Dr Radhika Oruganti**

Cardiff and Vale University Health Board