DELIRIUM IS A NEUROPSYCHIATRIC SYNDROME THAT OCCURS SECONDARY TO MEDICAL ETIOLOGIES, MEDICATIONS, AND/OR WITHDRAWAL STATES.


Recently extubated
- Withdrawal from Opioids?
  - Replace opioids as clinically indicated, consider Supportive Care consult for Pain Management

Recently extubated
- Withdrawal from Benzodiazepines following use of Lorazepam/Midazolam over weeks?
  - Replace benzodiazepines at 50-75% of the discontinued dose equivalent, taper by 20% daily. Consider Psychiatry consult

With or without vent
- If there is suspicion for brain mets, leptomeningial disease or COVID encephalitis
  - Consider brain imaging and further neuro work-up

With or without vent
- Multifactorial delirium Medical Work up as outlined in MSKCC Adult Delirium Protocol.
  - Use antipsychotics as below for signs and symptoms of delirium that place patients at risk of harm to self or others
  - Consider psychiatry consult
Pharmacological Management of Delirium in Adult COVID-19 Patients Outside of Critical Care Settings

- Obtain K⁺, Mg⁺, Ca⁺, Vitamin B12, TSH, maintain K>4, and Mg>2 while on antipsychotics
- Administer Thiamine 500 mg IV q8 for 3 days
- Obtain baseline and daily EKG
- If patients can take PO or have enteral route otherwise -> Start Ramelteon 8 mg PO QHS
- For all patients with history of Parkinson’s disease, parkinsonism, dementia, schizophrenia, intellectual disability, or bipolar disorder, consult Psychiatry for management of delirium.
- Please review all medication interactions and side effects on Lexicomp or FDA webpage before use
- When starting medications from the chart below, use combination of standing and ‘PRN for agitation’ orders to optimize management. Start low, go slow.

**IV/IM medication choice for agitation/delirium:**
- Haloperidol

  **Haloperidol IV**
  - Haldol 0.5mg BID or TID with further titration by 1-2mg/day up to 5 mg a day
  - Obtain daily EKG

  If no response or suboptimal response to the above, add benzodiazepine
  - Lorazepam 0.5mg BID or TID ideally given with Haloperidol up to Lorazepam 2 mg/day.
  - Consider Psychiatry Consult if not improved.

  IM can be considered
  - Call Psychiatry if IM medications are required

**Oral/Enteral route medication choice for agitation/delirium:**
- Olanzapine OR Quetiapine

  **Olanzapine 2.5-5mg PO or through NGT, QHS**
  - Titrate by 2.5-5mg/daily up to 10 mg/day if needed, consider switch to IV Haloperidol if not improved or consider Psychiatry consult.
  - Obtain daily EKG.

  If insomnia or nighttime agitation does not respond to Olanzapine, D/c Olanzapine and start Quetiapine 25 mg PO/NGT QHS.
  - Titrate by 25-50 mg/daily up to 100 mg/daily. Consider switch to IV Haloperidol if not improved or consider Psychiatry consult.
  - Obtain daily EKG.
  - Monitor closely for orthostatic hypotension and sedation.

COVID 19 medications+ use of antipsychotics increase risk for QT prolongation
Special Considerations

- Sedatives such as benzodiazepines are added to antipsychotics to assist with rapid sedation in a severely agitated patient and must be used judiciously as benzodiazepines may increase risk of delirium.
- Use of benzodiazepines is appropriate and required in patients with alcohol and/or benzodiazepine withdrawal delirium.
- Antipsychotics are used for patients with delirium who are at risk of harm to self (e.g., pulling out oxygen mask) or others, or those patients who experience significant distress due to symptoms of delirium (e.g., disturbing hallucinations, paranoid delusions)
- For geriatric patients, use antipsychotics sparingly and start lower, go slower due to increased risk of antipsychotic side effects.
- If using Hydroxychloroquine/Azithromycin: The risk of QT prolongation is further increased, especially with use of IV Haloperidol.
- If using IV benzodiazepines for over a week during mechanical ventilation: During the post-extubation stage, reduce standing benzodiazepine dose by 25 to 50%, and continue taper by 20% daily until discontinuation (consider slower taper and using prn benzodiazepines if withdrawal is a concern).
- Check daily for extrapyramidal symptoms (EPS) including parkinsonism, dystonia, akathisia, and neuroleptic malignant syndrome daily while on antipsychotics medications.
- For patients who require prn IV haloperidol for episodes of severe agitation, consider standing oral haloperidol instead of oral olanzapine or oral quetiapine, with the goal to use one antipsychotic medication.
- Consider Psychiatry consultation if agitation/delirium could not be managed despite Olanzapine 10 mg daily, Quetiapine 100 mg/daily or Haldol 5 mg daily, if there are concerns for antipsychotic side effects (e.g. EPS, QT prolongation), and if needed.

Taper and Discontinuation of Antipsychotics

- If patient is not agitated for 24 hours, reduce Olanzapine by 2.5-5 mg/ daily down to 2.5 mg/day. The goal is to discontinue Olanzapine before discharge or shortly after.
- If patient is not agitated for 24 hours, reduce Quetiapine by 12.5-50 mg/ daily down to 25 mg/day. The goal is to discontinue Quetiapine before discharge or shortly after.
- If patient is not agitated for 24 hours, reduce Haloperidol by 0.5-2 mg/daily down to 0.5 mg/day. The goal is to discontinue Haloperidol before discharge or shortly after.