

MCMASTER PROTOCOL: MANAGEMENT OF DYSPNEA FOR PATIENTS WITH COVID-19

Establish patient's Goals of Care and document (including DNR forms & DNR-C if community d/c).

Dyspnea Severity (clinical assessment, patient report and scale (e.g. Numeric Rating Scale)

MILD
Monitor
Support, O₂ if Sats <90%

MODERATE or SEVERE
O₂ if Sats <90%

Patient not on an opioid (opioid naïve)

Patient already on opioid

Opioids relieve dyspnea and coughing. Help relieve acute respiratory distress.
Evidence supports that appropriate opioid doses do not hasten death

MORPHINE

- **Start with 2.5 - 5mg PO or 1-2.5mg subcut/IV q4hrs PLUS 2.5-5mg PO or 1-2mg subcut/IV q1hr PRN for dyspnea**
 - Reduce dose (by half) in frail/elderly pts and pts with severe heart, lung, renal or neurological diseases. May also dose q6h instead of q4hrs
 - Avoid morphine if moderate/severe renal impairment
- If using 4 or more PRNs in 24hrs, re-evaluate and consider titrating up.**

HYDROMORPHONE

- **Start with 0.5- 1mg PO or 0.5mg subcut/IV q4hrs PLUS 0.5-1mg PO or 0.5mg subcut/IV q1hr PRN for dyspnea**
 - Reduce dose (by half) in frail/elderly pts and pts with severe heart, lung or neurological diseases. May also dose q6h instead of q4hrs
- If using 4 or more PRNs in 24hrs, re-evaluate and consider titrating up.**

DO NOT USE

Fans, O₂ flow greater than 6L/min, high flow nasal cannula O₂, CPAP or BiPAP, nebulized treatments (e.g. bronchodilators, saline). May aerosolize virus.
Avoid deep suctioning

CONTINUE Patient's OPIOID

- **Increase dose by 25%.**
 - If patient on slow release and able to swallow may continue. Use Subcut/IV route if dyspnea severe. Subcut/IV is ½ of PO dose total daily dose and given subcut/IV q4hrs
- **If severe switch to subcut q4hr** (unless patient is frail or elderly in which case may be q6-8hrs)
- **Ensure q1 hr PRN in place** PRN dose is usually 10% of the total daily dose. PRN doses can be titrated to up to 20% of daily dose.
- **If using 4 or more PRNs in 24hrs, re-evaluate and consider titrating up.**

If not effective, TITRATE

- Increase regularly scheduled dose by 50%. Monitor. Rate of titration depends on how patient tolerating (e.g. somnolence). Increase prn by 50% per dose if tolerating opioid well.
- Titration can be done after being 18 to 24hrs on the same total daily dose.

If not effective, or dyspnea crisis

- **Methotrimeprazine 6.25mg or 12.5mg subcut q4 hrs PRN** OR
- **Midazolam 1mg to 2mg subcut/IV q 1 hr PRN.** MD to review if 4 or more PRNs in 24hrs

For opioids: Use subcut/IV route when patient struggling to swallow or severe dyspnea. Subcut/IV doses are half PO dose

Add metoclopramide 5-10mg subcut QID PRN for opioid-induced nausea

For further support at any time, contact your local palliative care service

If patient's condition improves and dyspnea resolves, taper and discontinue opioid