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)
- 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 aerolize 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.
- Titrations 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 further support at any time, contact your local palliative care service

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

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

THESE RECOMMENDATIONS DO NOT SUPERCEDE CLINICAL JUDGEMENT. With adaptations from the COVID-19 Protocol of the BC Centre for Palliative Care. May be adopted or adapted with acknowledgement of Division of Palliative Care, Dept of Family Medicine, McMaster University and the BC Centre. This is ongoing work; please visit www.fhs.mcmaster.palliativecare for updates. Please share with us any improvements you may have by email Palcare@mcmaster.ca