

Worcestershire Acute Hospitals NHS Trust

Guideline for the Withdrawal of Non-Invasive Respiratory Support (NIV/CPAP)

In Patients with Proven or Suspected COVID-19

Aim and Scope of this Guideline

Respiratory support can be continued until death alongside symptom control, if it is felt to be helpful. This guideline is to support teams in the specific situation of withdrawing NIV/CPAP in patients with confirmed or suspected Covid-19. It should be used in conjunction with the NHS England and NHS Improvement Coronavirus “Specialty guide for the management of palliative care in hospital during the coronavirus pandemic”, Publication approval reference 001559, 27 March 2020, Version 1.

When to consider withdrawal of respiratory support:

- A patient deteriorating despite therapy, and thus the burden of treatment outweighs its benefits. If there is clinical uncertainty of burden/benefit balance from the medical team, a second opinion should be sought.
- A patient with capacity who requests withdrawal.
- A patient with a valid advance care plan / ADRT declining respiratory support.

Withdrawal of ineffective or unwanted medical treatment, including respiratory support, is recognised, appropriate, clinical practice. It is not assisted dying, suicide or euthanasia. This needs to be carefully communicated to patients, loved ones, and MDT colleagues.

Who to involve:

- Patients and Next of Kin (NOK) (if this is the patients wish)
- A senior clinical decision maker (this should be the respiratory consultant, but can be delegated to a registrar where an urgent decision is required for patient care and the consultant is not immediately available. Telephone advice with the on call consultant should be sought).
- Refer to the Ethical Clinical Decision Making in COVID-19 pandemic policy <http://www.treatmentpathways.worcsacute.nhs.uk/EasysiteWeb/getresource.axd?AssetID=207581&se rvicetype=Attachment>
- A second senior decision maker (consultant) if requested / any concerns with plan.
- Seek Multidisciplinary (MDT) opinion e.g. ward nurses, ARC ventilation team, Hospital Palliative Care Team (Out of hours/weekend: On Call Palliative Care Service via switchboard)
- An Independent Mental Capacity Advocate (IMCA) in patients who lack mental capacity and have no Next of Kin or if the Next of Kin is unwilling to participate in best interest decisions making.
- A senior doctor with dedicated time to initiate / run/ support withdrawal of respiratory support.
- A dedicated nurse to be involved with withdrawal / support withdrawal of respiratory support.
- A “runner”/ additional healthcare professional who can quickly bring medicines / extra equipment.
- Chaplaincy: consider religious/ spiritual needs prior to withdrawal.

Preparation (away from bedside):

- Aim for all withdrawals to be in usual working hours with planned staff (as outlined above) available.
- Doctor and nurse undertaking the withdrawal should “checklist” the personalised plan (Checklist located at the end of this document).
- Document mental capacity assessment and rationale for withdrawal.

The aim is to provide patients with an adequate level of sedation before the respiratory support is removed so that they are not distressed once that support is withdrawn. This will require the administration of subcutaneous (SC) anticipatory medicines “PRN” and through the use of subcutaneous (sc) syringe drivers. The medication doses below are specifically for the process of the withdrawal of NIV/CPAP process and are higher than those used for the management of symptoms in other contexts.

Prescribe:

- Morphine 5mg-10mg SC as needed. *For pain / breathlessness.*
- Midazolam 5mg-10mg SC as needed. *For sedation / distress.*
- Levomepromazine 12.5mg-25mg SC as needed, up to 150mg / 24hr. *For sedation.*
- Hyoscine Butylbromide 20mg SC as needed, up to 120mg/24hr *For secretions*

Dose Adjustments may be required for some patients

For patients established on opiates / benzodiazepines, larger doses may be needed.

For patients known to have severe side effects from morphine, use oxycodone 2.5mg-10mg SC PRN.

For patients with renal impairment (eGFR less than 30ml/min) dose adjustments may be required

For these circumstances contact Hospital Palliative Care Team for advice.

If secure (intravenous) IV access available, opiates and benzodiazepines may be given by this route if the patient is in distress and it may be a more responsive route to use in this situation than the s/c route. Use stat doses 2.5mg - 5mg morphine IV and midazolam 2.5 – 5mg IV given every 2 minutes, titrated until patient is comfortable.

An alternative to achieving sedation by repeated stat doses is to commence a continuous SC infusion CSCI, and then commence the withdrawal process with stat medicine doses after ~4 hours of infusion. If considering this method, please call the Hospital Palliative Care Team for advice. (Out of hours: On Call Palliative Care Service.)

Withdrawal process (by bedside):

Discussion points:

- Consider using virtual social contact to allow messages from NOK to be passed on prior to beginning. NOK can be *at the bedside* at the EOL stages, in keeping with trust policy.
- Medical and nursing team confirm plan with patient / NOK before proceeding.
- Acknowledge that there is uncertainty about how long the patient will live for after the respiratory support has been stopped.
- Reassure patient and NOK that the focus of care will be symptom management.
- If withdrawal is being done at patient’s request, they may request that NIV/CPAP **is or is not** reinstated at any point during withdrawal process.

Stages of Withdrawal:

1. **Give medicines in anticipation of symptoms when respiratory support is stopped.**
Ensure two separate subcutaneous SC lines in situ: alternate site if giving repeated doses to help drug absorption. Administer opioid and midazolam with aim for patient sedation.
Start with lower doses, repeat as needed.
2. **Assess the level of sedation before the respiratory support is stopped.**
Observe for several minutes.

3. Test whether the level of sedation is adequate.

If patient sedated and peaceful, wean the respiratory support to a PEEP of 10, then switch off the respiratory support but keep the mask in place. Observe for any signs of distress. Administer further medication if required and temporarily restart the respiratory support if needed (at same setting to previous).

4. Repeat step 3 until the patient is adequately symptom controlled without respiratory support.

Consider SC levomepromazine 12.5-25mg in addition to opioid and midazolam, if the patient is agitated.

IF NO EFFECT SEEN FROM REPEATED PRN DOSES, PAUSE PROCESS.

Is there another source for symptoms?

Call Palliative Care Team for advice.

5. Remove respiratory support.

If patient remains peaceful, remove mask. Consider switching to 10-15L/min NRB (Non re-breath) mask and then nasal cannula, Titrating the oxygen down to achieve patient comfort. Consider mouth care if required. Observe for several minutes. If patient symptomatic, administer further PRN medication and consider re-starting the respiratory support, or switching to IV medications if needed, and repeat steps 3-4.

6. Ongoing symptom control.

Consider low flow oxygen mask e.g. venturi 24% - 40%, or nasal cannula once withdrawal from NIV/CPAP completed. If patient is peaceful post-withdrawal, commence syringe driver to continue to deliver medicines for symptom relief.

Afterwards:

- If patient dies within minutes, complete COVID-19 death procedures immediately.
- If patient has not died, consider completion of the Individualised Last Days of Life Care Plan ensure regular review and assessment for any symptoms using the Palliative Care Symptom Observation chart. Administer further PRN doses as required.
- Review PRN dose administration after 4hrs and increase syringe driver infusion if required.
- Update Next of Kin.

Staff informal debrief post withdrawal

- Check in with colleagues involved in withdrawal- is everyone OK? Take a break, even if short, before continuing with clinical work wherever possible.
- Anything that went well? Any lessons to be learnt?
- Is support needed? Chaplaincy can support (via switchboard). Palliative care team (via switchboard). Trust Emotional Support Helpline (0300 303 3544).

After patient's death, link NOK to bereavement services promptly. Provide the Worcestershire Acute Hospitals NHS Trust patient information leaflet: Bereavement Information for Family/or Next of Kin during the current Coronavirus-19 Outbreak.

- Inform bereavement team of death
- After death of patients with COVID-19, offer NOK mementoes (e.g. lock of hair) **at the time**. These cannot be offered or undertaken at a later date. Any mementoes should be placed in a sealed bag which then must not be opened for 7 days.

The evidence base for withdrawal of NIV/CPAP is lacking, and at the time of writing there is no existing guideline for withdrawal in the context of COVID-19. This document has been modified from the University Hospitals of Leicester document: Respiratory Support Withdrawal (NIV CPAP HFNO) When Proven or Suspected COVID-19 UHL Guideline, 30.02.20.

Please document experiences clearly in medical records for future coding and potential analysis of care.

With your help, this document will evolve with our experience over time.

Palliative Care telephone support is available 24/7 via switchboard.
The Hospital Palliative Care Team will try to support in person when requested.

Guidelines prepared with reference to:

- COVID-19 and Palliative, End of Life and Bereavement Care in Secondary Care. Role of the specialty and guidance to aid care V1.0. Association of Palliative Medicine, Northern Care Alliance NHS Group.
- (<https://apmonline.org/> - online version evolving with time)
- Withdrawal of Assisted Ventilation at the request of a patient with MND. Association of Palliative Medicine, 2015.
- Written in conjunction with Respiratory and Palliative Care services, Worcestershire Acute Hospitals NHS Trust.

CHECKLIST FOR PERSONALISED PLAN: WITHDRAWAL OF RESPIRATORY SUPPORT

- Decision for withdrawal from a senior clinical decision maker (registrar or consultant).
- Documented mental capacity and rationale for withdrawal.
- MDT in agreement.
- Dedicated nurse / medic to run withdrawal.
- "Runner" to be available to quickly bring medicines / extra equipment.
- Anticipatory medicines for withdrawal process prescribed.

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5. Remove respiratory support.

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Consider low flow oxygen mask e.g. venturi 24% - 40%, or nasal cannula 2-6L/min, once withdrawal from NIV/CPAP completed. If patient is peaceful post-withdrawal, commence syringe driver to continue to deliver medicines for symptom relief.

- Update NOK and provide the Worcestershire Acute Hospitals NHS Trust patient information leaflet: Bereavement Information for Family/or Next of Kin during the current Coronavirus-19 Outbreak.

Check in with colleagues involved in withdrawal- is everyone OK?