NON - PARENTERAL DRUGS FOR SYMPTOM CONTROL and END OF LIFE CARE IN PANDEMIC COVID-19

**SYMPTOM CONTROL FOR PATIENTS WITH COVID 19 WHO ARE DETERIORATING AND WHERE ESCALATION TO VENTILATORY SUPPORT IS NOT INDICATED - ORAL and TRANSDERMAL ROUTES**

**COVID symptom control for end of life care: non-parenteral medications (for patients avoiding the need for subcutaneous route)**

A brief synopsis of advice for symptom control of those patients with significant symptoms from COVID.

* It is aimed for patients in any care setting – home, hospital, nursing home and the hospice
* All patients need an individual assessment and individualised prescribing.
* Once decision has been made that escalation to ventilatory support is not indicated this should be recorded on a TEP to clearly indicate to the team that an approach of best symptom control is appropriate should the patient develop rapidly increasing symptoms.
* **Specialist palliative care advice is available 24/7 via the Palliative Care Advice line on 01736 757707** and you should seek advice if unsure about what drugs or dosages to prescribe.
* Key is to consider whether the patients requires parenteral (sub cut) medications or non parenteral (oral, rectal, topical, sublingual routes). This guidance considers the non parenteral group. Additional guidance is available for those needing parenteral medications.
* This guidance addresses symptoms of breathlessness, agitation, pain, nausea and respiratory secretions. This is not an exhaustive list and individual patients may have other troublesome symptoms which need attention and may need specialist advice. All patients at end of life will need attention given to skin and mouth care, bladder and bowel symptoms and may need appropriate prescribing to address these.
* As symptoms can develop quickly and be severe, the usual medications to help alleviate these can be used. However, the frequency of the use of these medications are likely to need to be changed (i.e. to half hourly).

**Palliative Care contacts for advice (all services working together to ensure telephone support available, please use these services):**

24/7 advice line (consultant pall med) **01736 757 707**

Community palliative care nursing team Monday to Sunday, 9am-5pm **01208 251300**

Hospital palliative care nursing team Monday to Sunday 8am to 4pm via **bleep 3055**

For those patients who have been recognised as not for escalation to ventilatory support who are going home, a **COVID symptom control pack for the dying** has been produced alongside the Pharmacy teams. These are held in RCHT and aiming to be distributed to the community when this has been diagnosed/recognised by a senior clinician.

**Medications in symptom control pack for the dying**

|  |  |
| --- | --- |
| * Oramorph 10mg/5ml 25ml bottle 2.5mg – 5mg prn (pain, SOB, cough)
 | * Lorazepam 1mg tab S/L 1hrly/prn (max 4mg daily) x 14 tablets (agitation, distress)
 |
| * Paracetamol 500mg tablets x20 1g qds (pain, pyrexia)
 | * Levomepromazine 25mg tablet ¼ tablet 2hrly/prn (12 doses) (nausea, vomiting, agitation)
 |
|  | * Hyoscine hydrobromide 1.5mg patch – 1 patch every 72 hours x 1 patch (respiratory secretions)
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|  |  |
| --- | --- |
| **FOR BREATHLESSNESS & PAIN** If able to take oral medications | Oral Morphine 2.5 – 5mg IR (if opiate naïve)Morphine Sulphate MR 5-10mg bd (if opiate naïve) |
| If unable to take oral medications | Morphine suppositories (10mg)Paracetamol suppositories (500mg)\*\*\*Diclofenac suppositories (100mg) \*\*Buprenorphine transdermal patch 5-20mcg/hrSublingual Fentanyl tablets (Abstral) 100mcg SL, can be repeated 15-30 mins later |
| **FOR FEVER** If able to take oral medications | Paracetamol 1g qds\*Ibuprofen 400mg tds |
| If unable to take oral medications  | Paracetamol suppositories (500mg)\*Diclofenac suppositories (100mg) |
| **FOR ANXIETY & DISTRESS** If able to take oral medications | Oral diazepam 2-5mg qds prn |
| If unable to take oral medications | Sublingual lorazepam 0.5-1mg SL qds prn. Diazepam 5-10mg prn Buccal midazolam 2.5-10mg (2.5mg in 0.5mls)\* Clonazepam SC once daily |
| **FOR DELERIUM/CONFUSION**Able to take oral medicationsUnable to take oral medications**SECRETIONS**Able to take oral medicationsUnable to take oral medications | Haloperidol 1.5mg bdLevomepromazine 6.25mg up to qdsLevomepromazine SC once dailyAmitriptyline 10-30mg odGlycopyrronium 200-400mcg prn to max 1200mcg/24hrs (oral solution/suspension) Hyoscine transdermal patch (Scopoderm) 1.5mg/72 hoursHyoscine hydrobromide tablets (Kwells) 300mcg SL 8-hrlyAtropine 1% ophthalmic solution 1-4 drops SL 4-hrly |
| **ANTIEMETICS**Able to take oral medications | Metoclopramide (10mg tds)Domperidone (10mg tds)Cyclizine (50mg tds)Haloperidol (0.5-1.5mg od – bd)Levomepromazine (6.25-12.5mg od – bd)Ondansetron (8mg bd)Olanzapine (5mg and 10mg orodispersible)Hyoscine hydrobromide tablets (Kwells) 300mcg SL 8-hrly |
| Unable to take oral medications | Buccal Prochlorperazine (Buccastem) (3-6mg bd)Ondansetron suppositories (16mg od)Hyoscine hydrobromide TD patch (Scopoderm) 1.5mg/72hrsLevomepromazine SC once daily |

**\*\* FOR PAIN ONLY**

**PAIN & BREATHLESSNESS**

Can take PO Medications

Unable to take PO Medications

\*\*Paracetamol 1gm qds

\*\*NSAID

Regularly

Needs Opioid

Opioid Naive

Currently Taking Opioid

Start with MST 10mg bd (5mg bd if elderly/frail)

+ Oramorph 2.5-5mg 1-4 hourly PRN

(Discuss with SPCT if medical status or side effects necessitate consideration of change of opioid, eg confusion, renal failure.)

Continue current regime and titrate as needed.

(Discuss with SPCT if advice needed)

\*\*Paracetamol suppositories

1g qds PR

\*\*Diclofenac suppositories 100mg PR od

Needs Opioid

Opioid Naive

(give consideration to current general condition and medical status)

Currently Taking Opioids

**Please see opioid conversion table and parenteral symptom control advice.**

**Consider need for syringe driver**

It is not advised to start a fentanyl patch in opioid naive patients without specialist advice.

Buprenorphine transdermal patch (Butrans) changed every 7 days may be appropriate for some patients.

5mcg/hr ≡ 12mg Morphine oral per day

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12mcg/hr ≡ 30mg Morphine daily

PRN medications available:

SL Fentanyl (Abstral) 100mcg

**Please see opioid conversion table and parenteral symptom control advice.**

Convert to syringe driver and consider other symptom control medication needed in SD.

**FOR ANXIETY & DISTRESS**

Able to take

PO Medications

Unable to take

PO Medications

SL Lorazepam (Genus) 0.5-1mg prn qds

PO Diazepam 2-10mg prn/od-tds

SL Lorazepam (Genus) 0.5-1mg prn qds

Buccal Midazolam 2.5-10mg prn

PR Diazepam 5-10mg prn

\* SC Clonazepam 0.5–1mg can be given once daily

**FOR FEVER**

If able to take

PO Medications

If unable to take

PO Medications

Paracetamol 1g qds

Ibuprofen 200-600mg tds

Paracetamol suppositories 1g qds PR

Diclofenac suppositories 100mg od PR

**FOR NAUSEA & VOMITING**

Able to take

PO Medications

Unable to take

PO Medications

Haloperidol 0.5-1.5mg od/bd

Metoclopramide 10-20mg td

Levomepromazine 6.25 – 25 mg od

Domperidone 10-20mg tds

Cyclizine 50mg tds

Levomepromazine 6-12mg od-bd

Olanzapine 5-10mg od orodispersible (Velotab)

Ondansetron (Zofran Melt) 8mg bd

Hyoscine Hydrobromide tablets (Kwells) 300mcg 8 hourly SL

Buccal Stemetil (Buccastem) 3-6mg bd

Ondansetron suppositories 16mg od

Hyoscine Hydrobromide TD patch (Scopoderm) 1mg/72hrs

\* SC Levomepromazine 6.25-12.5mg can be given once daily

**Anticipatory prescribing guidance (APG) for symptom control and dying phase care**

**Guidance for anticipatory prescribing and symptom control at the end-of-life**

**Opioid dose conversion**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Symptom** | **Drug** | **PRN subcutaneous dose for anticipatory symptoms, as needed** | **Starting dose range over 24 hours in syringe driver (subcutaneous) if needed** | **Vial Strengths** | **Maximum dose over 24 hours** |
| **1. Pain/Breathlessness**NB If already on oral opioids, see below for conversion**. If severe renal impairment, seek specialist advice** | **Diamorphine** | 2.5mg 1 hourly if opioid naïve or 1/6th of 24 hr subcutaneous opioid dose**\*\*** | 7.5mg-15mg (if not already taking opioids) | 5,10,30 or 100mg amps | No upper limit |
| **Morphine** | 2.5mg-5mg 1 hourly prn if opioid naïve or 1/6th of 24 hr subcutaneous opioid dose**\*\*** | 10mg-20mg (if not already taking opioids) | 10mg/ml | No upper limit |
| **2. Nausea/vomiting** Opioid or centrally induced | **Haloperidol and/or** | 1.5mg-3mg bd | 3mg-5mg | 5mg/ml | 10mg |
| **Cyclizine** | 50mg tds (if not on regular cyclizine) | 150mg | 50mg/ml | 150mg |
| Prokinetic | **Metoclopramide** | 10mg tds | 30mg-60mg | 10mg/2ml | 80mg |
| Second Line | **Levomepromazine** | 6.25mg qds | 6.25mg-12.5mg | 25mg/ml | 25mg |
| **3. Agitation** +anxiety (1st line) | **Midazolam** | 2.5mg-5mg initially 1 hourly prn**\*\*** | 10mg-30mg | 10mg/2ml | 60mg |
| +hallucinations or confusion | **Haloperidol** | 1.5mg-3mg bd**\*\*** | 3mg-5mg | 5mg/ml | 10mg |
| **Levomepromazine** | 6.25-12.5mg (max qds)**\*\*** | 6.25mg-12.5mg | 25mg/ml | 100mg |
| **4. Noisy breathing due to respiratory tract secretions** | **Glycopyrronium Bromide** | 200 microgram 4 hourly | 600microgram – 1200 microgram | 600mcg/3ml | 1200 microgram |
| **Hyoscine Butylbromide** | 20mg 4 hourly | 60mg-100mg | 20mg/ml | 120mg |
| **Hyoscine Hydrobromide** | 400 microgram 4 hourly | 1.2mg-2.4mg | 400mcg/ml | 2.4mg |

**\*\*During the COVID Pandemic, the frequency of PRN subcutaneous doses for anticipatory symptoms may need to change to half hourly in response to rapidly changing symptoms including medications for severe breathlessness, acute respiratory distress or agitation.**

Advice is available 24 hours a day,

Conversion of oral opioids to parenteral opioids is overleaf.\* Cyclizine is not compatible with Hyoscine Butylbromide or Oxycodone in a syringe driver.

**Opioid conversion chart**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Oral Morphine** | **Subcutaneous Morphine** | **Subcutaneous Diamorphine** | **Oral Oxycodone** | **Subcutaneous Oxycodone** | **Fentanyl Transdermal** | **Subcutaneous Alfentanil** |
| **4hr dose (mg)** | **12hr SR dose (mg)** | **24 hr total dose (mg)** | **4hr dose (mg)** | **24hr total dose (mg)** | **4hr dose (mg)** | **24hr total dose (mg)** | **4hr dose (mg)** | **12hr SR dose (mg)** | **24hr total dose (mg)** | **4hr dose (mg)** | **24hr total dose (mg)** | **Patch strength (micrograms)** | **4hr dose (mg)** | **24hr total dose (mg)** |
| 5 | 15 | 30 | 2.5 | 15 | 1.25 | 10 | 2.5 | 7.5 | 15 | 1.25 | 7.5 | 12mcg | 0.125 | 1 |
| 10 | 30 | 60 | 5 | 30 | 2.5-5 | 20 | 5 | 15 | 30 | 2.5 | 15 | 25mcg | 0.25 | 2 |
| 15 | 45 | 90 | 7.5 | 45 | 5 | 30 | 7.5 | 25 | 50 | 3.75 | 25 | 25mcg | 0.5 | 3 |
| 20 | 60 | 120 | 10 | 60 | 7.5 | 40 | 10 | 30 | 60 | 5 | 30 | 37mcg | 0.75 | 4 |
| 30 | 90 | 180 | 15 | 90 | 10 | 60 | 15 | 45 | 90 | 7.5 | 45 | 50mcg | 1 | 6 |
| 40 | 120 | 240 | 20 | 120 | 12.5 | 80 | 20 | 60 | 120 | 10 | 60 | 75mcg | 1.25 | 8 |
| 50 | 150 | 300 | 25 | 150 | 15 | 100 | 25 | 75 | 150 | 12.5 | 75 | 75mcg | 1.5 | 10 |
| 60 | 180 | 360 | 30 | 180 | 20 | 120 | 30 | 90 | 180 | 15 | 90 | 100mcg | 2 | 12 |
| 70 | 210 | 420 | 35 | 210 | 25 | 140 | 35 | 105 | 210 | 17.5 | 100 | 125mcg | 2.5 | 14 |
| 80 | 240 | 480 | 40 | 240 | 27.5 | 160 | 40 | 120 | 240 | 20 | 120 | 125mcg | 2.5 | 16 |
| 90 | 270 | 540 | 45 | 270 | 30 | 180 | 45 | 135 | 270 | 22.5 | 135 | 150mcg | 3 | 18 |
| 100 | 300 | 600 | 50 | 300 | 35 | 200 | 50 | 150 | 300 | 25 | 150 | 150mcg | 3.5 | 20 |
| 110 | 330 | 660 | 55 | 330 | 37.5 | 220 | 55 | 165 | 330 | 27.5 | 165 | 175mcg | 3.75 | 22 |
| 120 | 360 | 720 | 60 | 360 | 40 | 240 | 60 | 180 | 360 | 30 | 180 | 200mcg | 4 | 24 |

This is to be used as a guide rather than a set of definitive equivalences. Most data on doses is based on single dose studies so it is not necessarily applicable in chronic use, also individual patients metabolise different drugs at varying rates. The advice is always to calculate doses using Morphine as standard and to adjust them to suit the patient and the situation. Some of these doses have by necessity been rounded up or down to fit in with the preparations available.(Reproduced with kind permission of Margaret Gibbs, St Christopher’s Hospice 2nd edition 2006)

|  |  |  |  |
| --- | --- | --- | --- |
| **Drug** | **Drug dose** | **Approximate codeine equivalence** | **Approximate oral morphine equivalence** |
| BuTrans 5 | 5 micrograms/**hour** | 60mg/**24 hours** | 10mg/ **24 hours** |
| BuTrans 10 | 10 micrograms/**hour** | 120mg/**24 hours** | 20mg/ **24 hours** |
| BuTrans 20 | 20 micrograms/**hour** | 240mg/ **24 hours** | 40mg/ **24 hours** |