# OPIOID CONVERSION GUIDANCE

# Basic principles

The “Gold Standard” and NICE recommended (CG140, May 2012) opioid for the management of severe pain is morphine sulphate (or parenteral morphine sulphate for patients unable to take oral medication).

Patients receiving regular opioids should always be prescribed breakthrough medication at a dose appropriate for their daily requirement.

Generally a breakthrough dose will be 1/6th of the total daily dose.

Parenteral opioids are between 2 and 3 times the potency of oral opioids.

An opioid switch may be indicated, e.g., morphine side-effects which do not respond to appropriate management, and renal impairment.

**Use of alternative opioids**

Renal impairment is likely to increase drug toxicity from morphine due to accumulation of active metabolites of these drugs.

Patients taking opioid medication who develop renal impairment may require a dose reduction. Advice should be sought from the Specialist Palliative Care Team (SPCT) or Pharmacy.

Morphine should not be used if the patient’s eGFR is <40 and an opioid switch to oxycodone is recommended, unless renal impairment and morphine dose is stable and there is no evidence of adverse effects

At even lower levels of eGFR (<15), oxycodone may not be tolerated and the use of alfentanil would be indicated: always discuss this with the SPCT.

**Use of opioids in the dying patient**

In the terminal phase, renal impairment, hypoalbuminaemia and an increase in the permeability of the blood/brain barrier will all affect drug pharmacokinetics and may lead to toxicity. Extreme caution is needed when calculating breakthrough doses of opioids for patients receiving transdermal fentanyl at the end of life.

Attached is a table with guidance for suggested breakthrough doses for existing background requirements.

**Advice is available from the Specialist Palliative Care Team at Huddersfield Royal Infirmary ext 2965, or from Pharmacy**

**Out-of-hours’ palliative medicine advice is available through switchboard or Kirkwood or Overgate Hospices.**

**CONVERSION TABLE FOR COMMON ORAL, SUBCUTANEOUS AND PATCH PREPARATIONS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Morphine** | **Oxycodone** | **Morphine** | **Diamorphine** | **Oxycodone** | **Fentanyl** | **Alfentanil** |
| **Oral** | **Oral** | **Subcutaneous** | **Subcutaneous** | **Subcutaneous** | **Transdermal** | **Subcutaneous** |
| **4hr** | **12hr** | **24hr** | **4hr** | **12hr** | **24hr** | **4hr** | **24hr** | **4hr** | **24hr** | **4hr** | **24hr** | **Patch** | **24hr** |
| **dose****(mg)** | **MR****dose****(mg)** | **total****dose****(mg)** | **dose****(mg)** | **MR****dose****(mg)** | **total****dose****(mg)** | **dose****(mg)** | **total** **dose****(mg)** | **dose****(mg)** | **total** **dose****(mg)** | **dose****(mg)** | **total dose** **(mg)** | **Strength****(microgram/hr)** | **total** **dose (mg)** |
| 2.5 | 10 | 20 | 1 - 1.5 | 5 | 10 | 1.5-2.5 | 10 | 1 | 7.5 | 1 | 5 | - | 0.5 |
| 5 | 15 (MST) | 30 | 2.5 | 10 | 20 | 2.5 | 15 | 1.5-2 | 10 | 1 - 1.5 | 7.5 | - | 1 |
| 10 | 30 | 60 | 5 | 15 | 30 | 5 | 30 | 2.5-5 | 20 | 2.5 | 15 | 12 mcg\* | 2 |
| 15 | 45 | 90 | 7.5 - 10 | 25 | 50 | 7.5 | 45 | 5 | 30 | 2.5 - 5 | 25 | 25 mcg | 3 |
| 20 | 60 | 120 | 10 | 30 | 60 | 10 | 60 | 5-7.5 | 40 | 5 | 30 | 37 mcg\* | 4 |
| 30 | 90 | 180 | 15 | 45 | 90 | 15 | 90 | 10 | 60 | 7.5 | 45 | 50 mcg | 6 |
| 40 | 120 | 240 | 20 | 60 | 120 | 20 | 120 | 10-15 | 80 | 10 | 60 | 75 mcg\* | 8 |
| 50 | 150 | 300 | 25 | 75 | 150 | 25 | 150 | 15-20 | 100 | 12.5 | 75 | 75 mcg\* | 10 |
| 60 | 180 | 360 | 30 | 90 | 180 | 30 | 180 | 20 | 120 | 15 | 90 | 100 mcg | 12 |
| 70 | 210 | 420 | 35 | 100 | 200 | 35 | 210 | 20-25 | 140 | 17.5 | 100 | 125 mcg\* | 14 |
| 80 | 240 | 480 | 40 | 120 | 240 | 40 | 240 | 25-30 | 160 | 20 | 120 | 125 mcg\* | 16 |