


<p>Taunton and Somerset  NHS Foundation Trust</p>	<p>Trust Guideline</p>
<p>Title: Use of Naloxone in Palliative Care Adult Patients</p>	
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<p>Accepted date: 18 September 2018</p>	<p>Review date: 18 September 2021</p>
<p>Applies to: All Medical and Nursing Staff who care for patients receiving Modified release Opioids who are at risk of Life Threatening Opioid Induced toxicity</p>	<p>Exclusions: None</p>
<p>Purpose: Guidelines for the administration of Naloxone for the reversal of respiratory depression in patients receiving prescribed modified release opioids for pain control (long term use for chronic pain management and for patients with life limiting/ incurable disease)</p>	
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Key Points

- This guidance is to intended to provide information about the use of Naloxone, an opioid antagonist, in patients receiving prescribed modified release opioids in a clinical setting
- It is not relevant in the management of acute opioid overdose.
- Naloxone should only be used when opioid induced toxicity is causing severe respiratory depression.
- It should not be used in patients who are dying as a natural result of their disease progression and are taking modified release opioids
- Naloxone cannot reverse symptoms induced by non-opioids, e.g. benzodiazepines.

1 Background

- 1.1 Naloxone is a potent opioid antagonist and is effective in the reversal of opioid-induced respiratory depression.
- 1.2 There is no NICE guidance on the use of Naloxone to reverse respiratory depression in patients prescribed opioids for pain relief. Guidelines have been produced by several local trusts based on the palliative care formulary and expert opinion.
- 1.3 The risk of respiratory depression in a patient who has already been on a regular opioid dose (for even a few days) is very small.
- 1.4 Locally there have been several cases which have highlighted the risk of causing severe pain and distress by the complete reversal of pain relief with the use of Naloxone given rapidly and at high dose. This is highlighted in an NHS Patient safety alert: Risk of distress and death from inappropriate doses of Naloxone in patients on long term opioid/ opiate treatment 20.11.14.

Please see Algorithm on page 4

2 Diagnosis and treatment of opioid toxicity

- 2.1 Is the patient showing signs of opioid toxicity?
These are drowsiness, confusion, myoclonic jerks and hallucinations. If these are the only symptoms and the patient is easily rousable and there is NO respiratory depression then:
 - If the patient has no pain reduce the opioid dose by a **third** to a **half**.
 - If the patient still has pain consider whether the pain really is opioid responsive and contact a specialist for advice.
- 2.2 Is the patient showing signs of opioid toxicity *and* has a reduced respiration rate (less than **8 breaths per minute**) and is **unrousable**? Then you will need to reverse some but not all of the effect of the opioid. You only want to reverse the respiratory depression and *not* the analgesia.
- 2.3 Administer high flow oxygen.
- 2.4 Draw up **400micrograms** of **Naloxone** in a 10ml syringe and dilute to **10mls** with **0.9% Sodium Chloride**. You now have 10mls of medication containing 40microgram/ml Naloxone.

2.5 Administer **0.5ml = 20micrograms Naloxone IV every 2 minutes until the patient is rousable** and has a respiratory rate of more than **10 breaths per minute**.

2.6 If the patient has been taking slow release opioids (e.g. Oxycodone SR – OxyContin® or Longtec® or Morphine SR – MST®/ Zomorph®) then it is likely that further dosing will be required as the opioid will remain in the circulation for longer than the Naloxone. In this situation consult a specialist and continue close observation of the patient.

3 Other management considerations

3.1 Intravenous Naloxone is the preferred route of administration for Naloxone, but can be given intra-muscularly or subcutaneously if venous access difficult. Onset of action will be slower with IM or S/C administration. If giving **IM** give **200microgram Bolus dose** and continue to **monitor every 2-3 minutes**.

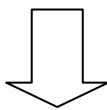
3.2 Buprenorphine has a very strong receptor affinity, reflected in its high relative potency with Morphine, therefore Naloxone in standard doses does not reverse the effects of Buprenorphine and higher doses must be used.

4 Ongoing monitoring

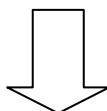
4.1 Naloxone has a much shorter half-life than Morphine. There is a risk therefore of the opioid toxicity reoccurring as the Naloxone wears off (usually between 1-2 hours) and the opioid remains active. It is essential that respiratory rate and oxygen saturations should be closely monitored until stable. It is recommended monitoring/observation should be for a minimum of 2 hours to maintain adequate reversal.

4.2 The half-life of Morphine and other commonly used opioids is prolonged in renal failure.

**OPIATE TOXICITY IN PATIENT ON
LONG-TERM OPIOIDS**



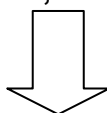
RESPIRATORY RATE (RR) \leq 8 BREATHS MINUTE



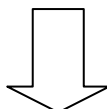
ADMINISTER HIGH FLOW OXYGEN

MONITOR BP, RR and SaO₂

IF IV ACCESS

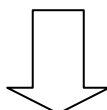


Dilute 400micrograms of NALOXONE in 10mls of 0.9% Sodium Chloride

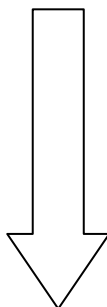


**ADMINISTER 20micrograms (0.5ml) BOLUS DOSE CHECKING FOR RR
 \geq 10 BREATHS MINUTE – REPEAT EVERY 2 MINUTES UNTIL
ROUSABLE and RR \geq 10 BREATHS MINUTE**

**This may require repeated doses and syringes as above. Please document
dose amounts given and their effect on RR/GCS/Pain**



**ONCE RR \geq 10 BREATHS MINUTE CONTINUE TO MONITOR SaO₂ and RR
EVERY 15 minutes for 2 hours, then every 30 minutes for the next 6 hours.
Review and continue to monitor for a further 6-12 hours**



**Contact Specialist Palliative Care
Team for Advice Bleep 2014
(Mon-Fri, 9-5)
OOH – 0845 0708910**

IF RR \leq 8 BREATHS MINUTE – REPEAT ALGORITHM

References

- NHS patient safety alert: Risk of distress and death from inappropriate doses of naloxone in patients on long term opioid/ opiate treatment 20.11.14.
- Vandenburg.M. medico legal report on The Risks in Use of Naloxone with Patients Dependent on Opiates for Analgesia Especially for Those who have Cardiac Problems, 2012
- Twycross R. Wilcock A. et al. Palliative Care Formulary 4. Fourth Edition, Oxford, 2011. Electronic version available at: www.palliativedrugs.com
- Scottish Palliative Care Guidelines Nov 2014