SAINT FRANCIS HOSPICE

POLICY/PROCEDURE:	**Opioid toxicity in the community, and in the hospice (management of). Includes use of naloxone.**
Department: **Clinical**	**Originator:** **Dr. Corinna Midgley**
Applicable to:	**All Clinical Staff**
Purpose of the document:	**To support generic community, specialist palliative care community, and hospice staff in recognising opioid toxicity and in implementing safe management.**
Who was consulted:	**This policy was adopted by the NEL Palliative Care Advisory Board in July 2007, as 'Management of opioid overdosage in the community'. Slight adjustments have been made to allow relevance to hospice practice too.**
Approved by:	**NEL PCAB, Sue Lakey Ward Manager, Mel Howes CPCT Manager, Jane Sutherland Director of Patient Services**
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Circulation list – to receive revisions	**Nursing and Medical Teams on the Inpatient Unit, in Day Hospice and in Community Services.** **Education Centre**

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Policy Statement

Strong opioids are commonly used to control pain for patients with advanced, life limiting disease (i.e. to palliate problems related to that advanced disease), and to manage chronic, severe pain. Overdosage leading to serious toxicity is rare because of the care with which morphine and other opioids are initiated, and the care taken with titration up, paced according to need for relief of symptoms (usually relief of pain; occasionally relief of breathlessness). This policy identifies the features of serious opioid toxicity - as opposed to the features of advanced progressive disease per se, and identifies a strategy for managing suspected serious opioid toxicity in patients with advanced disease. It identifies the place for naloxone, an opioid antagonist, in the management of suspected serious opioid toxicity within a patient with advanced disease.

Features of serious opioid toxicity and important differential diagnoses

Features of serious opioid toxicity include drowsiness and respiratory depression (respiratory rate of less than 8 per minute).

However patients who are reaching the end of their life are often drowsy due to the advanced stage of their illness so that sometimes it might feel difficult to know whether drowsiness is a result of opioid toxicity – or advanced illness/dying.

One clear difference is that serious opioid toxicity usually emerges over a period of hours-whereas dying emerges over a period of days and respiratory rate changes in advanced illness and in the dying phase are characterised by irregular, shallow or Cheyne-Stokes type breathing as opposed to respiratory depression.

Dangers in treating advanced illness/dying changes as opioid toxicity

If decline due to advancement of illness is interpreted as serious opioid toxicity, and naloxone is administered, a pain crisis can be precipitated resulting in poor symptom management for the patient. Carers might witness the patient, previously comfortable and pain free, becoming uncomfortable, agitated and distressed which is very distressing in itself for a watching friend, family member or professional carer. There will be no gain in terms of length of or quality of life, just distress.

Management plan

Identification of opioid toxicity.

If a patient on opioids for palliation of symptoms begins to become more sleepy do re-evaluate the situation.

- Are they iller? *(did you expect this in the context of the illness?)* Might there be
  - New, or escalating disease e.g. brain metastases *(can this escalation of disease be modified? Are investigations needed?)*
  - New metabolic changes e.g. hypercalcaemia, uraemia, liver failure *(would it be appropriate to explore via blood screening?)*

- Decreased need for analgesia and thus a need to reduce the regular amount taken *(look for **complete** comfort as a backdrop. Subtle emergent features of new toxicity such as hallucinations, dreams are often present. Can you trial a gentle reduction in the regular opioid dose?)*
- Does their current strong opioid not suit? *(a clue that this is the case is continued pain but with features of toxicity: somnolence, hallucinations. Solution: change in pain regime e.g. a switch in opioids requiring Specialist Palliative Care Team advice and support*)

Or…

- Are they dying now?

If the care team is experiencing difficulty in evaluating a complex situation they should consider seeking involvement of or support from the local Specialist Palliative Care Team.

If the patient is recognised to be dying now, supportive care tools such as the Liverpool Care Pathway offer excellent guidance for the care team in managing the care needs of a dying patient in the best way possible.*

If the above are explored and do not apply, and/or opioid toxicity is suspected the following management plan should be employed.

A conservative approach to managing opioid toxicity is recommended.

Management of opioid toxicity

- If respiratory rate is 8/minute or more, and the patient is easily rousable and not cyanosed, adopt a policy of 'wait and see'. Consider reducing or omitting the next regular dose of morphine and reducing the ongoing dose of regular opioid by 1/3. ('Safety net' against emergent pain by ensuring the availability of prns in the house calculated to be congruent with the new regular dose).

- If respiratory rate <8/minute but the patient is rouseable and not cyanosed, omit the next regular dose of morphine and reduce the ongoing dose of regular opioid a/a.

- **If respiratory rate <8/minute and the patient is barely rousable/unconscious and/or cyanosed consider admission into either hospital or hospice for further management.**

  However you must note that some people will have directed the care team to avoid hospital now, even for management of crises (if 'preferred place of care' in crisis time is home). It is vital to weigh up their advance decision along with your clinical findings. You may elect to adopt a 'wait and see' policy despite poor clinical findings because of the passion of their advance directive, in the face of advanced illness, or even to deliver a bolus of naloxone at home (see below) and observe response.

  Next step, in the hospital or hospice setting, or, rarely at home:

  - Stop the opioid
  - Administer oxygen by face mask

- Dilute a standard ampoule containing naxolone 400microgram to 10ml with sodium chloride 0.9%
- Administer 0.5ml (20 microgram) IV every 2 minutes until the patient's respiratory status is satisfactory. The aim is for slow, paced administration of the drug to avoid a surge of pain from complete antagonism of opioid
- Do note that naloxone is relatively short acting. If the patient recovers their respiratory rate and improves, even so he/she needs careful observation in case of relapse, with likely need for further naloxone, until their opioid begins to 'wear off'.

Follow up of opioid toxicity

- It is vital to consider why the patient became toxic, in an effort to prevent recurrence of toxicity.
  Possible reasons include:
  - Too hasty a titration up of opioid
  - A mistake in upward titration
  - Toxicity secondary to an opioid switch. The most common reason for switching opioids is that a patient is toxic with opioid 1, whilst still being in pain. The aim being to reduce toxicity and improve pain control by switching to opioid 2. Although we use conversions all the time, developed as a result of experience of dose equivalence, very occasionally an individual is far more sensitive to opioid 2, requiring much less of it to maintain comfort than expected. Thus the very switch makes them much more toxic than previously
  - Toxicity secondary to an opioid switch because of incorrect conversion (in effect accidental overdose due to incorrect clinician advice)
  - Accidental or purposeful overdosage by the patient
  - Development in difficulty in break down or excretion of the opioid-e.g. development of liver or renal failure

Following treatment, advice must be sought from the local Specialist Palliative Care Team whether the patient stays in the community, or whether he/she transfers into hospital, since a plan for future symptom management is essential. Please do refer to the Specialist Palliative Care Team.

Please do note that the above community management plan echoes the approach (identification of, and management of opioid toxicity) within Saint Francis Hospice.

Please also note that our hospice experience is that toxicity to the degree of needing naloxone is extremely rare. Despite caring for a large number of patients who need to use strong opioids, there have only been two inpatient hospice episodes in the last five years requiring naloxone reversal[1].

[1] From 2001-2006 inc.