



NSW
Therapeutic
Advisory
Group Inc.

Advancing
quality use
of medicines
in NSW

Group Discussion: Current status of pethidine use in NSW public hospitals

Date: March 2018

Background:

NSW TAG wrote to Drugs and Therapeutics Committee (DTC) Chairs in March 2016 following a request from the Clinical Excellence Commission's NSW Maternal and Perinatal Root Cause Analysis Review Committee for assistance in removing pethidine from formulary and reducing the ongoing use of pethidine in labour in some NSW facilities. Their advice highlighted the poor analgesia provided by pethidine during labour, the potential for significant adverse effects and the wide availability of more effective forms of analgesia. As at February 2016, pethidine remained on the formulary in a significant number of hospitals/Local Health Districts (LHDs) in NSW. For some, it was confined to use for specific non-obstetric indications. However, a significant number reported low use of pethidine for labour pain, generally as the alternative opioid analgesic to morphine when the patient reported morphine allergy. NSW TAG provided protocols, guidelines or standing orders regarding analgesic use in obstetric patients from three LHDs. These were uploaded onto the members' section of our website under the High Risk Medicines- Narcotics webpage to assist other hospitals developing documents for use of analgesics in labour. NSW TAG email discussions in 2015 and 2016 highlighted successful strategies that have been employed by some hospitals to limit pethidine's use or remove it from formulary. The National Quality Use of Medicines (QUM) Indicator for Australian Hospitals 6.3: Percentage of parenteral opioid dosage units that are pethidine also assists quality improvement projects in those facilities that retain pethidine on formulary; available at <http://www.nswtag.org.au/qum-indicators-set-6/>.

In early 2018, a letter was sent to DTC chairs and secretaries to follow-up the current status of pethidine use in NSW public hospitals, particularly its use in labour.

Question:

DTC chairs and secretaries were asked to provide the following information:

- a) What is the current status of formulary listing of pethidine and for what indications?
- b) What is the current use of pethidine in labour: if used, please provide further information regarding extent of use and barriers to removal.
- c) Has there been development/update of guidelines, protocols or standing orders regarding analgesic use in obstetric patients since March 2016. Please provide these in order to update our webpage.

Responses:

Eleven responses were received in total.

Two sites currently has pethidine on formulary *with restrictions*:

- Nepean Hospital: Previously on formulary without restrictions. Consultation with potential prescribers of pethidine has occurred, and the formulary was altered to restrict pethidine to use "By or on the instruction of an anaesthetic or Intensive care specialist for epidural analgesia (For clarity, this is intended to require that a specialist must specifically approve its use in an individual case)".
- Concord Repatriation General Hospital (CGRH): stock of pethidine still kept which is used almost exclusively by endoscopy and colonoscopy unit.

Nine sites indicated Pethidine is *not* on formulary and if requested would require an IPU:

- SSEH: pethidine is not stocked at Sydney/Sydney Eye Hospital.
- Blue Mountains District AM Hospitals: Previously on formulary and used by one non-specialist anaesthetist in obstetrics ward, who has left hospital. Effectively off formulary as Head of Anaesthetics is not supportive of its use.
- Manning Base Hospital: Not in use in the Mid North Coast Sector of the Hunter New England Health District. Hasn't been used for over twelve months. Have one box of five amps in the safe and it will stay there until it goes out of date. We have used about 10 ampoules in the last three years, they were maternity cases (allergic to everything else and prescribers were locum consultants). I know some hospitals keep it for Endoscopic Retrograde Cholangiopancreatography (ERCP) but we don't do them here.
- Bowral Hospital: Not on formulary and not used at all in labour. For patients with a true morphine allergy we have a standing order for fentanyl subcutaneously 50-100mcg (max 2 doses; this standing order has not been used to my knowledge as true allergy is rare for us).
- Murrumbidgee LHD (MLHD):
 - a) Previously only on formulary without restrictions at Wagga Wagga Hospital. Pethidine was officially been removed from the MLHD formulary in November, 2016.
 - b) There remains the very rare instance of pethidine being used at Wagga Wagga Rural Referral Hospital. This has been in spinals if allergic to local anaesthetic AND for post-operative shivering. There is a growing awareness however of the use of tramadol and other

alternatives in post-operative shivering as per literature review carried out by HNE Drug Information and distributed by NSW TAG in 2016.

c) The current morphine analgesia in labour standing order is due for review and re-approval in May (available on request).

- Wollongong Hospital: Previously on formulary but removed in 2017 when the Obstetrics and Gynaecology unit endorsed the use of subcutaneous morphine.

- South Eastern Sydney Local Health District (SESLHD): Pethidine was removed completely in 2016 following NSW TAG's advice. It is subsequently not used in any of our facilities for labour or any other indications. We don't have any district-wide guidelines or standing orders for analgesics in obstetric patients. I'm not aware that the Royal Hospital for Women have any local pain management guidelines either.

- John Hunter Hospital (JHH):
 - a) Pethidine should not be prescribed at the JHH and would require IPU approval for use. A very limited quantity of pethidine is available in the JHH operating theatres. As there are few absolute indications for the use of this agent, prescription is restricted to anaesthetists only or with liaison with the Duty Anaesthetist or Integrated Pain Service for use outside of theatres. Appropriate indications include: neuraxially in patients with allergy to amide local anaesthetics and management of shivering in the post-operative period where other alternatives (e.g. tramadol, clonidine, dexmedetomidine) are contraindicated or have been ineffective. Continuation of therapy outside the post-operative care unit must only occur after approval from either the Duty Anaesthetist or Integrated Pain Service. Please note that pethidine is not indicated for use in patients with allergy to other opioids.

If considered clinically necessary, an Individual Patient Use Form should be completed, with accompanying evidence included, signed off and submitted to the JHH Quality Use of Medicines Committee for approval before the drug is requested. Normally the Acute Pain Service should be asked to consult prior to completing the form. This procedure includes patients admitted already on pethidine. All prescribers (including community based clinicians) must have an authority from the Pharmaceutical Services Unit of the Ministry of Health if they are prescribing an injectable drug of addiction (Schedule 8) for greater than two months, or to a person they believe is drug dependent.

b) Not used in obstetrics/labour at JHH (or other HNELHD Birthing Units as previously advised)

c) Local Pethidine procedure supplied (available on request).

- Far West Local Health District (FWLHD): Pethidine removed from formulary in January 2018. Previous maternity standing orders for pethidine have been rescinded. There has been negligible use of pethidine in any clinical context in FWLHD since 2016.

Responses received as at 6th March 2018

Please note that all information and policies are only current at the time the response is sent and individual hospitals should be contacted to ascertain current policies and practices. The responses received are only representative of the hospitals participating in the discussion at the time and do not necessarily indicate a complete picture of current practices. Information sharing occurs on the understanding that due acknowledgement will be given to the original source and that the information will not be quoted or used out of the context of the discussion. Permission should be sought from the original source before any policy, protocol or guideline is used or applied in another setting.