

Series Manual

Lidocaine Infusions for Pruritus – Series 58

Background

Pruritus is an unpleasant cutaneous sensation associated with the desire to scratch and can have a significant impact on patients' quality of life. It is a symptom experienced in a diverse range of life-limiting illnesses in the palliative care population, with various underlying pathophysiology, including uraemia in end-stage renal failure, cholestasis, paraneoplastic disorders in malignancy, neuropathic, drug-related or dermatological conditions. Secondary complications include severe dryness and skin ulceration which can lead to pain and secondary infections.

The mainstay of first-line management includes managing reversible factors, topical emollients, wet dressings, and avoiding drying soaps and overheating. Topical corticosteroids or antipruritics can provide some benefit for milder forms of pruritus. Oral antihistamines may have limited benefit as most itch-sensitive C fibres are histamine-independent (Davidson *et al.* 2007). Other systemic therapies include gabapentinoids and antidepressants, but use can be limited by organ impairment, tolerance and ability to swallow oral medications safely and consistently.

Lidocaine is a systemic local anaesthetic and membrane stabilising agent which blocks sodium channels. Previous case studies have described the effective use of parenteral lidocaine for severe pruritus caused by a range of conditions. However, the evidence base for lidocaine in pruritus is currently very limited, despite anecdotal reports that continuous subcutaneous infusion of lidocaine used in the palliative care setting can result in significant improvement in pruritus of various underlying causes, with rapid onset and minimal side effects or toxicity. Monitoring of patient investigations prior to and during lidocaine administration may be limited in the palliative care population, in the context of focus on comfort and dignity, especially in the end-of-life care setting. Therefore, there is considerable interest and scope for further pharmacovigilance studies of lidocaine in pruritus to increase the evidence base for its use in palliative care.

Patient tracking

A log or spreadsheet should be developed in order to track the patient medical record number and the study ID number allocated to each patient when commenced on a medication/intervention. This spreadsheet will be the only link between the data collected and the identity of the patient and remains the property of the participating site. This information should not be shared with the IMPACCT Trials Coordination Centre (ITCC). The spreadsheet should also contain the date and time of the data entry at each time point.

Participant ID number	Patient name	Patient medical record number	Date of initial data entry	Time of data entry

Allocating a Participant ID (PID) number

The PID for each set of data collected is a composite number built up using a series of three codes.

i) Site identifier

This is the number allocated to each participating site as a 2- or 3-digit number.

ii) Medication number

The medication number for the **Lidocaine Infusions for Pruritus** is **58**

iii) Participant number

This is a three-digit number starting with the first participant from 001, followed by 002, 003, and so on.

Therefore, the full patient ID number will be; ***Site identifier/medication number/patient number***

e.g., 01/58/001

Time points

There are 3 main time points where data is required.

1. Commencement of the medication (baseline) – (T₀)
2. 24 hours post baseline – (T₁)
3. 3 to 5 days post baseline – (T₂)

Other data collection points are:

1. Harm/adverse event at unexpected time points
 - There can be up to three other times where harm can be recorded (Ad hoc A, B and C)
 - These pages can be left blank if there are no unexpected harms/adverse events
2. Cessation of the medication
 - Complete this page if the medication/intervention of interest is ceased at any time during the data collection period for any reason.
3. Date of death
 - Enter the date of death if/when known.
 - If the date of death is entered during the data collection period, no further prompts will be received

Each medication/intervention of interest will have different time points for clinical benefit and adverse events according to its profile. Time points are determined by each Series subcommittee and are based on clinical experience and published product information.

Adverse event assessment

Adverse events (or harms) are assessed using a standard scale from the National Cancer Institute Criteria for Adverse Events (NCI CTCAE). The NCI uses a scale between 1 and 5 ranging from mild to serious (resulting in death) symptoms or sequelae. The NCI criteria are provided as a reference document which is supplied separately and should be referred to for any events recorded in association with the patient's clinical course.

Each medication/intervention has a number of pre-populated expected adverse events (harms). These are listed at each time point, and the NCI grade is described and provided for easy reference. A grade should be provided for each listed adverse event.

If unexpected adverse events occur at any other time, either before or after any pre-determined time point, these should be recorded in the unexpected adverse event section of the case report form (Ad hoc A, B and C).

Data entry

The REDCap data entry link can be acquired by emailing rapid@uts.edu.au and requesting the link to the series that is applicable to you.