

## LIGNOCAINE SUB CUTANEOUS INFUSION FOR CHRONIC PAIN

*This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.*

### LIGNOCAINE SUBCUTANEOUS MAY ONLY BE PRESCRIBED BY A CHRONIC PAIN CONSULTANT OR FELLOW

#### 1. AIM

- To provide symptom relief for patients with chronic neuropathic pain disorders.

#### 2. PATIENT

- Woman with diagnosed chronic neuropathic pain.

#### 3. STAFF

- Medical and nursing staff

#### 4. EQUIPMENT

- Dedicated pain management pump with locked box specifically programed to deliver infusion only.
- Appropriate giving set - straight with NO SIDE PORT
- Lignocaine 2% premix bag (100mL)
- Brown subcutaneous additive label & brown subcutaneous line labels
- Blue ANTT tray
- NSW Health Adult Fluid Order Chart (NH606582)

#### 5. CLINICAL PRACTICE

- **Perform ECG on patient and ensure chronic pain consultant or fellow reviews same for conduction defects prior to commencement of lignocaine infusion<sup>1</sup>**
- Patients may be managed/nursed on the general ward.

##### Prescribing

- **Lignocaine subcutaneous may only be prescribed by a chronic pain consultant or fellow.**
- Prescribe infusion on NSW Health Adult Fluid Order Chart.
- Chart enough orders to last until the next medical review by the Chronic Pain Team. Medical reviews and recharting need to occur within 24 hours.
- Duration of treatment is usually between 5-7 days.
- Dosage – Appendix 1
- Observations – Appendix 2
- Adverse events and management – Appendix 3

#### 6. DOCUMENTATION

- EMR
- NSW Health Adult Fluid Order Chart
- Gynaecological Clinical Pathway

## LIGNOCAINE SUB CUTANEOUS INFUSION FOR CHRONIC PAIN cont'd

### 7. EDUCATIONAL NOTES

- Systemic local anaesthetic type drugs are effective in the treatment of chronic neuropathic pain states, particularly after peripheral nerve trauma<sup>1</sup>
- Lignocaine stabilises the neuronal membrane and prevents the initiation and transmission of nerve impulses.
- It is recommended that the patient has an ECG and a medical officer reviews the ECG for conduction defects prior to the administration of Lignocaine<sup>1</sup>
- This infusion presents a falls risk for the patient. Please refer to Falls Prevention and Management Policy below.

#### Contraindications

- Adams-Stokes Syndrome
- Wolff-Parkinson-White Syndrome
- Severe atrio-ventricular, sino-atrial, or intraventricular heart block not managed with a pacemaker.
- Sensitivity to amide-type local anaesthetics.
- Refer to MIMS for more information

### 8. RELATED STANDARDS / POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Prevention Infection and Control Policy - PD 2017/013
- Medication Handling in NSW Public Health Facilities - PD 2013/043
- High Risk Medicines Management Policy - PD 2015/029
- User-applied Labelling of Injectable Medicines, fluids and lines - PD 2016/058
- Labelling of Injectable Medicines, Fluids and Lines
- Patient (Adult) with Acute Condition for Escalation (PACE) Criteria and Escalation
- Clinical Handover: Implementation of ISBAR Framework and Key Standard Principles - SESLHDPR/303
- Patient with Acute Condition for Escalation (PACE): Management of the Deteriorating ADULT and MATERNITY Inpatient - SESLHD PR/283
- Falls Prevention and Management for People admitted to Acute and Sub Acute Care - SESLHDPR/380

### 9. RISK RATING

HIGH

### 10. NATIONAL STANDARD

4- Medications

### 11. REFERENCES

1. Systemic administration of local anaesthetic agents to relieve neuropathic pain [Cochrane Database](#)
2. Australian and New Zealand College of Anaesthetists and Faculty of Pain Medicine. 2010, Acute Pain Management: Scientific Evidence. Third Edition
3. MIMS

### REVISION & APPROVAL HISTORY

Reviewed and endorsed Therapeutic & Drug Utilisation Committee 28/4/21

Approved Quality & Patient Care Committee 16/8/18

Endorsed Therapeutic & Drug Utilisation Committee 12/7/18

**FOR REVIEW : MAY 2023**

## APPENDIX 1

### Dosing

DRUG & PRESCRIPTION	CONCENTRATION	SUB-CUT INFUSION RANGE <sup>5</sup>	STARTING DOSE
Lignocaine 2% (2000mg in 100mL premix bag)	20mg / 1mL OR 2000mg / 100mL	1mL – 5mL / hour OR 20mg – 100mg / hour	1mL / hour OR 20mg / hour
<b>It is recommended to start the infusion at the low to mid-rate especially if the patient is prone to low blood pressure, and then titrate according to medical assessment</b>			
<b>Infusion rate may be increased after 12 – 24 hours depending on response. A medical Officer must prescribe this after review of the patient.</b>			

## APPENDIX 2

### Patient Observations

- Perform blood pressure, heart rate, respirations and pain score every hour for four (4) hours then every four (4) hours whilst on infusion.
- Document patient observations on EMR

## APPENDIX 3

### Adverse Events and Management

- Observe patient for possible signs of systemic local anaesthetic toxicity which include:<sup>8</sup>
  - Light-headedness
  - Numbness of mouth and tongue
  - Tinnitus
  - Visual disturbance
  - Muscular twitching
  - Cardiovascular depression including hypotension and bradycardia
  - Drowsiness
  - Convulsions
  - Coma
  - Respiratory arrest
- Cease infusion if side effects occur and call Clinical Review, Rapid Response or CODE Blue if necessary.
- Contact chronic pain team or APS.