1. Overview

Purpose
This protocol outlines the administration, prescribing and monitoring of nortriptyline at Waitemata District Health Board.

Scope
All medical and nursing staff

![This guideline is for use in Palliative Care ONLY.]

2. Presentation
Nortriptyline 10mg and 25mg tablets

3. Indications

Licensed:
Depression, smoking cessation¹

Unlicensed:
Neuropathic pain²,³

4. Mechanism of Action

Nortriptyline is a tricyclic anti-depressant and an active metabolite of amitriptyline. It blocks the presynaptic re-uptake of noradrenaline and inhibits the activity of serotonin, histamine and acetylcholine. It has a sedative effect which helps to improve sleep but is generally less sedating than amitriptyline. It has less anticholinergic effects than amitriptyline.
5. Dose

<table>
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<tr>
<th>Indication</th>
<th>Dose</th>
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| Neuropathic Pain  | • 10 – 50mg nocte  
• Start with 10mg nocte and increase slowly according to response  
• As this will take 3 to 5 days to take effect, the dose can be  
  increased by 10mg every 3 days as necessary if the patient  
  tolerates it. \(^1\) |
| Depression        | • 25 – 100mg nocte (max of 50mg in the elderly). \(^1\)  
• Start with 25mg nocte (10mg in the elderly) and increase every 2-  
  4 weeks according to the response. \(^2\) |

**Note:** Nortriptyline’s anticholinergic effects are less potent than amitriptyline and therefore side effects may be better tolerated. \(^4\) *(refer Amitriptyline protocol)*

6. Administration

- Only available as an oral preparation.
- Administer once daily, preferably at bedtime due to possible sedation.

7. Observation and Monitoring

- Monitor for constipation, urinary retention, confusion and excessive sedation.
- Consider blood pressure monitoring when starting nortriptyline if at risk for postural hypotension e.g. if patient taking cardiac medications.

8. Contraindications and Precautions

**Contraindications\(^1\)**

- Hypersensitivity to nortriptyline or amitriptyline
- Acute recovery phase following a myocardial infarction
- Use within two weeks of a mono-amine oxidase inhibitor (MAOI)

**Precautions\(^1, 5\)**

- Elderly
- Cardiac disease
- Arrhythmias
- Epilepsy
- Bipolar disorder
- Urinary retention
- QT prolongation
- Narrow angle glaucoma
- Hepatic impairment
- Hyperthyroid
- Emergence of suicidal ideation
- Clinical worsening of depression
- Diabetes (increased risk of hypoglycaemia)

The potential for tricyclics to cause delirium is high (due to anticholinergic activity) and great care should be exercised when using these agents in the frail elderly, agitated patients or in patients on multiple other medications.

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This information is correct at date of issue. Always check on Waitemata DHB Controlled Documents site that this is the most recent version.
9. Possible Adverse Effects

- Dry mouth
- Blurred vision
- Mydriasis
- Constipation
- Urinary retention
- Drowsiness
- Palpitations
- Arrhythmias
- Confusion/Delirium
- Paralyticileus

- Increased intraocular pressure
- Restlessness
- Insomnia
- Hallucinations
- Nightmares
- Hyponatraemia
- Non-specific ECG changes
- Postural hypotension
- Anorexia/Nausea
- Withdrawal on abrupt cessation

10. Drug Interactions

- Monoamine oxidase inhibitors
- Selective serotonin reuptake inhibitors (SSRIs)
- Other antidepressants
- Other anticholinergic/sympathomimetic medications
- Concomitant administration of medications known to lower the seizure threshold (i.e. quinolones, tramadol)
- Central nervous system depressants
- Medications that prolong the QT interval
- Cimetidine and terbinafine increase the plasma concentration of nortriptyline
- Carbamazepine decreases the plasma concentration of nortriptyline

11. References

1. Medsafe Website – Nortriptyline Datasheet


5. New Zealand Formulary online, release 46-1 April 2016 – Nortriptyline monograph.