

# DEPRESCRIBING GUIDE FOR ANTICHOLINERGIC DRUGS FOR URINARY INCONTINENCE (ANTIMUSCARINICS)

(including oxybutynin, solifenacin, tolterodine, darifenacin, propantheline)



This guide provides deprescribing information that can be applied to written and/or verbal communication (in the form of “preferred language”) between clinicians, patients and/or carers. Adapt appropriately for individual patients.



## GO TO SECTION:

Indication

How to wean

Alternative management

Monitoring

Evidence-based advice

Summarised phrasing during admission and/or at discharge

References

## CONSIDER TWO STEPS WHEN DEPRESCRIBING:

1

Should I deprescribe?

2

How do I deprescribe?

## STEP 1: SHOULD I DEPRESCRIBE? (PATIENT ASSESSMENT)

### Deprescribing triggers:

- Inappropriate indication, no current indication, presence or risk of adverse events, drug interaction, drug-disease interaction, high drug burden index (DBI),<sup>1</sup> poor adherence, or patient preference.

### 1a) Is there a documented indication or symptoms supporting continued use?

#### Inappropriate indication for continued use:

- Continued use despite no improvement in symptoms such as urinary frequency or incontinence.
- Use of multiple medications with anticholinergic effects.
- Concurrent or planned treatment with acetylcholinesterase inhibitors for dementia.

#### Do not deprescribe if:

- Urinary incontinence has improved and adverse effects are not apparent or not significant to the patient.

### 1b) Are there adverse effects?

#### Consider potential adverse effects:

- Falls, urinary retention, blurred vision, dry mouth, constipation, increased QT interval, dizziness, confusion, drowsiness.<sup>2</sup>

### 1c) Is this medication likely to cause more harm than benefit?

See [Evidence-based advice](#) for additional information on risks of harm and benefits of continued use.

### 1d) Does the patient/carer agree with the recommendation to deprescribe?

Following provision of information, discussion and shared-decision making, the patient or carer has communicated that they would like to proceed with or decline the deprescribing recommendation.

## PREFERRED LANGUAGE:

(Adapt for each patient and medicine as appropriate)

\_\_\_\_\_ is currently taking \_\_\_\_\_  
(patient name) (drug name: e.g. oxybutynin 5mg three times daily)

for \_\_\_\_\_, and is currently experiencing/at risk of \_\_\_\_\_.  
(indication: e.g. urge incontinence) (patient issue: e.g. adverse effects)

The \_\_\_\_\_ outweighs the \_\_\_\_\_ for continued use of \_\_\_\_\_.  
(risk/benefit + rationale) (risk/benefit + rationale) (drug name: e.g. oxybutynin)

Discussed with \_\_\_\_\_ and \_\_\_\_\_ deprescribing recommendation.  
(patient /carer name) (agreed/willing to trial/considering/declined)

## STEP 2: HOW DO I DEPRESCRIBE? (RECOMMENDATION AND MANAGEMENT)

### 2a) How to wean

#### Key Points

- Establish a supportive and trusting relationship with the patient to engage in complex/sensitive discussions.
- Accompany weaning with commencement of relevant non-pharmacological therapy. See [Alternative management](#) recommendations.
- In general, wean gradually by 25-50% of the daily dose every 1-4 weeks.
- If reason for deprescribing is due to serious adverse effects, consider weaning faster.
- Provide advice to patient/carer on self-monitoring and what to do if symptoms re-occur.
- Organise appropriate follow up appointments with general practitioner (GP) (frequency determined by rate of weaning).

#### Initiation

Reduce dose slowly by 25-50% of the daily dose each week to month.

#### Adjustments depend on response

Adjust according to response (see [Monitoring](#) recommendations).

- If no withdrawal symptoms occur, continue to wean then stop.
- In the presence of worsening confusion, cease outright.
- Consider slower weaning (e.g. 12.5%) when reducing to the final lowest dose. End treatment 2 weeks after administering the lowest dose.
- Consider alternate day dosing to aid with weaning if dosage forms are limited.

#### Adjustments in the case of recurrent symptoms

In the case of recurrent/withdrawal symptoms, revert to the previous lowest tolerated dose. Recommence weaning after 6-12 weeks at the lower weaning rate (e.g. 5-12.5% of daily dose each month) then stop.

(Based on recommendations in [References](#)<sup>2-6</sup>)

### PREFERRED LANGUAGE:

(Adapt for each patient and medicine as appropriate)

**Recommend non-pharmacological replacement therapy to reduce reliance on antimuscarinics.**

Recommend gradually reducing to \_\_\_\_\_ for \_\_\_\_\_ and reassess,  
(drug: e.g. oxybutynin 5mg twice daily) (timeframe: e.g. 1 week)

then reduce to \_\_\_\_\_ for \_\_\_\_\_ and reassess,  
(e.g. oxybutynin 2.5mg twice daily) (e.g. 1 week)

then reduce to \_\_\_\_\_ for \_\_\_\_\_ and stop.  
(e.g. oxybutynin 2.5mg daily) (e.g. 2 weeks)

Follow up with GP \_\_\_\_\_ after discharge.  
(e.g. fortnightly)

## 2b) Alternative management

### Non-pharmacological support

Symptom diary, attention to fluid intake, avoiding constipation, bladder training, timed toileting and incontinence aids, pelvic floor exercises, toileting assistance.

### Switching within drug class or consider alternative therapy

Consider changing formulation or switching to another antimuscarinic medication if anticholinergic medication is effective but cannot be tolerated due to adverse drug reactions [AMH-Anticholinergics (genitourinary)].

Mirabegron is registered for overactive bladder and is a beta3 adrenergic receptor agonist, not an antimuscarinic, with a different side effect profile. It is not currently funded by the PBS.<sup>2</sup>

## PREFERRED LANGUAGE:

Use **symptom diary, attention to fluid intake, avoiding constipation, bladder training, timed toileting and incontinence aids, pelvic floor exercises, and toileting assistance** concurrently.

## 2c) Monitoring

Monitor short term (within 1-3 days)	Monitor long term ( >7 days)
<p><b>Monitor for withdrawal symptoms</b> Symptoms can occur within 1-3 days of dose reduction.</p>	<p><b>Monitor for recurrence of symptoms</b> Recurrence of previous or new symptoms (e.g. incontinence, urinary urgency) may occur within 1-2 weeks of dose reduction.</p>
<ul style="list-style-type: none"> <li>Withdrawal symptoms (irritability, anxiety, insomnia, sweating and gastrointestinal effects [e.g. nausea]) are usually mild, highly variable and can last up to 6-8 weeks.</li> <li>If severe symptoms (e.g. severe anxiety, tachycardia, orthostatic hypotension, severe insomnia) occur, restart at the previous lowest effective dose.</li> </ul>	

## PREFERRED LANGUAGE:

Within 1-3 days of dose reduction, monitor for **withdrawal** symptoms which can be **mild** (e.g. nausea, sweating, irritability) or **severe** (e.g. anticholinergic discontinuation syndrome including *anxiety, tachycardia, orthostatic hypotension, insomnia*).

Monitor for **recurrence** of symptoms within 1-2 weeks of dose reduction, including *incontinence or urinary urgency*.

Restart at lowest effective dose with retrial deprescribing at 6-12 weeks.

## EVIDENCE-BASED ADVICE

### Effectiveness and safety

A systematic review of trials over 2-52 weeks, found antimuscarinics reduced episodes of incontinence compared to placebo by 0.4 to 1.1 incontinence episodes per day, with a pooled relative risk (RR) of 1.3-3.5 ( $p < 0.01$ ).<sup>7</sup>

The RR for any adverse event when using an antimuscarinic in comparison to placebo varied between 1.13 and 2.00. Higher doses were associated with a higher risk of withdrawal due to adverse events (oxybutynin 7.5–10 mg/day RR 1.91; 95% CI 1.18–3.10, oxybutynin 15 mg/day RR 1.89; 95% CI, 1.23–2.90, and solifenacin 10 mg/day (RR 1.53; 95% CI, 1.02– 2.30).<sup>7</sup>

Over 90% of people would be willing to stop their medicines if recommended by their physician.<sup>8</sup>

### Recommended duration of use

Limit drug treatment to short-term use. Antimuscarinics are associated with significant harm (e.g. falls, fractures), and long term use is not recommended, especially in older adults.

# SUMMARISED PHRASING DURING HOSPITAL ADMISSION AND/OR AT DISCHARGE

When communicating deprescribing decisions to GPs at discharge, written and verbal communication should include information in the sequence of:

**“Medicine, Intention, Rationale. Clear Plan (dose change, duration, follow up). Patient agreement”**

## PREFERRED LANGUAGE

(write in GP follow up plan and medication list):

\_\_\_\_\_ : \_\_\_\_\_ due to \_\_\_\_\_ outweighing effects \_\_\_\_\_.  
current medication (e.g. oxybutynin)      stopped/reduced with aim of stopping      specific rationale (e.g. constipation)      of/on current indication (e.g. on urinary incontinence)

\_\_\_\_\_ reduced to \_\_\_\_\_ for \_\_\_\_\_, then \_\_\_\_\_. Patient/Carer agreed.  
If weaning, old dose changed to new dose (e.g. oxybutynin 5mg TDS reduced to oxybutynin 5mg BD)      if weaning, time frame (e.g. 2 weeks)      follow-up action (e.g. GP to follow up 2 weeks, monitor for increased urinary symptoms)

Refer to [www.nswtag.org.au/deprescribing-tools/](http://www.nswtag.org.au/deprescribing-tools/)

### Example:

*Oxybutynin: reduced with aim of stopping due to constipation outweighing effects on urinary incontinence. Oxybutynin 5mg TDS reduced to oxybutynin 5mg BD for 2 weeks then GP to follow up 2 weeks, monitor for increased urinary symptoms. Patient agreed.*

Refer to [www.nswtag.org.au/deprescribing-tools/](http://www.nswtag.org.au/deprescribing-tools/)



NSW Health Translational  
Research Grant Scheme 274

Version 1\_October 2018

1. Hilmer SN, Mager DE, Simonsick EM, et al. A drug burden index to define the functional burden of medications in older people. Arch Intern Med. 2007; 167(8):781-787. Available at <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/412262> 2. Australian Medicines Handbook (AMH): Anticholinergics (genitourinary). 2018. 3. NPS Medicinewise. Anticholinergic drugs for overactive bladder. Aust Prescr. 2006; 29:22-4. 4. Therapeutic Guidelines Limited. eTG complete: Anticholinergic Toxidrome. 2018. 5. Medstopper. Available at <http://medstopper.com> 6. Kouladjian O'Donnell L, Gnjjidic D, Nahas R, et al. Anticholinergic burden: considerations for older adults. J Pharm Pract Res. 2017; 47(1): 67-77. 7. Chapple CR, Khullar V, Gabriel Z, et al. The effects of antimuscarinic treatments in overactive bladder: an update of a systematic review and meta-analysis. Eur Urol. 2008; 54(3):543-62. 8. Reeve E, Wiese MD, Hendrix I, et al. People's attitudes, beliefs, and experiences regarding polypharmacy and willingness to deprescribe. J Am Geriatr Soc. 2013; 61(9): 1508-1514.

Copyright and Disclaimer

© 2019 Northern Sydney Local Health District, NSW Therapeutic Advisory Group Inc., Sydney Local Health District, the University of Sydney and Macquarie University

The Work on this webpage and the copyright Works downloaded via this webpage are copyright remain the joint property of Northern Sydney Local Health District, NSW Therapeutic Advisory Group Inc., Sydney Local Health District, the University of Sydney and Macquarie University. By downloading this PDF, you are accepting our Terms and Conditions. You may download, display, print and reproduce the Works in unaltered form only (retaining this notice or the notice imprinted into the original download), with all other rights reserved. Any enquiries in regards to copyright, sharing the copyright Works, or requests for further authorisations should be directed in writing to Prof Sarah Hilmer at [sarah.hilmer@sydney.edu.au](mailto:sarah.hilmer@sydney.edu.au).



## GO TO SECTION:

Indication

How to wean

Alternative management

Monitoring

Evidence-based advice

Summarised phrasing during admission and/or at discharge

References