Benzodiazepine & Z-Drug (BZRA) Deprescribing Algorithm

February 2019


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This algorithm and accompanying advice support recommendations in the NICE guidance on the use of zaleplon, zolpidem and zopiclone for the short-term management of insomnia, and medicines optimisation. National Institute for Health and Care Excellence, February 2019

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**Why is patient taking a BZRA?**

If unsure, find out if history of anxiety, past psychiatrist consult, whether may have been started in hospital for sleep, or for grief reaction.

- Insomnia on its own OR insomnia where underlying comorbidities managed
  - For those ≥ 65 years of age: taking BZRA regardless of duration (avoid as first line therapy in older people)
  - For those 18-64 years of age: taking BZRA > 4 weeks

**Engage patients**

(discuss potential risks, benefits, withdrawal plan, symptoms and duration)

**Recommend Deprescribing**

**Taper and then stop BZRA**

(taper slowly in collaboration with patient, for example – 25% every two weeks, and if possible, 12.5% reductions near end and/or planned drug-free days)

- For those ≥ 65 years of age
  - (strong recommendation from systematic review and GRADE approach)
- For those 18-64 years of age
  - (weak recommendation from systematic review and GRADE approach)
- Offer behavioural sleeping advice; consider CBT if available (see reverse)

**Monitor every 1-2 weeks for duration of tapering**

Expected benefits:

- May improve alertness, cognition, daytime sedation and reduce falls

Withdrawal symptoms:

- Insomnia, anxiety, irritability, sweating, gastrointestinal symptoms (all usually mild and last for days to a few weeks)

**Use non-drug approaches to manage insomnia**

- Use behavioral approaches and/or CBT (see reverse)

**Continue BZRA**

- Minimize use of drugs that worsen insomnia (e.g. caffeine, alcohol etc.)
- Treat underlying condition
- Consider consulting psychologist or psychiatrist or sleep specialist

**If symptoms relapse:**

Consider

- Maintaining current BZRA dose for 1-2 weeks, then continue to taper at slow rate

Alternate drugs

- Other medications have been used to manage insomnia. Assessment of their safety and effectiveness is beyond the scope of this algorithm. See BZRA deprescribing guideline for details.

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### Benzodiazepine & Z-Drug (BZRA) Deprescribing

#### Patients should understand:
- The rationale for deprescribing (associated risks of continued BZRA use, reduced long-term efficacy)
- Withdrawal symptoms (insomnia, anxiety) may occur but are usually mild, transient and short-term (days to a few weeks)
- They are part of the tapering plan, and can control tapering rate and duration

#### Tapering doses
- No published evidence exists to suggest switching to long-acting BZRAs reduces incidence of withdrawal symptoms or is more effective than tapering shorter-acting BZRAs
- If dosage forms do not allow 25% reduction, consider 50% reduction initially using drug-free days during latter part of tapering, or switch to lorazepam or oxazepam for final taper steps

#### Behavioural management

**Primary care:**
1. Go to bed only when sleepy
2. Do not use bed or bedroom for anything but sleep (or intimacy)
3. If not asleep within about 20-30 min at the beginning of the night or after an awakening, exit the bedroom
4. If not asleep within 20-30 min on returning to bed, repeat #3
5. Use alarm to awaken at the same time every morning
6. Do not nap
7. Avoid caffeine after noon
8. Avoid exercise, nicotine, alcohol, and big meals within 2 hrs of bedtime

**Institutional care:**
1. Pull up curtains during the day to obtain bright light exposure
2. Keep alarm noises to a minimum
3. Increase daytime activity & discourage daytime sleeping
4. Reduce number of naps (no more than 30 mins and no naps after 2 pm)
5. Offer warm decaf drink, warm milk at night
6. Restrict food, caffeine, smoking before bedtime
7. Have the resident toilet before going to bed
8. Encourage regular bedtime and rising times
9. Avoid waking at night to provide direct care
10. Offer backrub, gentle massage

#### What is cognitive behavioural therapy (CBT)?
- CBT includes 5-6 educational sessions about sleep/insomnia, stimulus control, sleep restriction, sleep hygiene, relaxation training and support

#### Does it work?
- CBT has been shown in trials to improve sleep outcomes with sustained long-term benefits

#### Who can provide it?
- Clinical psychologists usually deliver CBT, however, others can be trained or can provide aspects of CBT education; self-help programs are available

#### How can providers and patients find out about it?
- Some resources can be found here: [https://mysleepwell.ca/](https://mysleepwell.ca/)

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#### BZRA Availability

<table>
<thead>
<tr>
<th>BZRA</th>
<th>Strength</th>
</tr>
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<tbody>
<tr>
<td>Alprazolam (Xanax®) T</td>
<td>0.25 mg, 0.5 mg, 1 mg, 2 mg</td>
</tr>
<tr>
<td>Bromazepam (Lectopam®) T</td>
<td>1.5 mg, 3 mg, 6 mg</td>
</tr>
<tr>
<td>Chlorzepate (Tranxene®) C</td>
<td>5 mg, 10 mg, 25 mg</td>
</tr>
<tr>
<td>Clonazepam (Rivotril®) T</td>
<td>0.25 mg, 0.5 mg, 1 mg, 2 mg</td>
</tr>
<tr>
<td>Clopazepam (Tranxene®) C</td>
<td>3.75 mg, 7.5 mg, 15 mg</td>
</tr>
<tr>
<td>Diazepam (Valium®) T</td>
<td>2 mg, 5 mg, 10 mg</td>
</tr>
<tr>
<td>Flurazepam (Dalmane®) C</td>
<td>15 mg, 30 mg</td>
</tr>
<tr>
<td>Lorazepam (Ativan®) T, S</td>
<td>0.5 mg, 1 mg, 2 mg</td>
</tr>
<tr>
<td>Nitrazepam (Mogadon®) T</td>
<td>5 mg, 10 mg</td>
</tr>
<tr>
<td>Oxazepam (Serax®) T</td>
<td>10 mg, 15 mg, 30 mg</td>
</tr>
<tr>
<td>Temazepam (Restoril®) C</td>
<td>15 mg, 30 mg</td>
</tr>
<tr>
<td>Triazolam (Halcion®) T</td>
<td>0.125 mg, 0.25 mg</td>
</tr>
<tr>
<td>Zopiclone (Imovane®, Rhovane®) T</td>
<td>5 mg, 7.5 mg</td>
</tr>
<tr>
<td>Zolpidem (Sublinox®) S</td>
<td>5 mg, 10 mg</td>
</tr>
</tbody>
</table>

T = tablet, C = capsule, S = sublingual tablet

#### BZRA Side Effects

- BZRAs have been associated with:
  - physical dependence, falls, memory disorder, dementia, functional impairment, daytime sedation and motor vehicle accidents
- Risks increase in older persons

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