Guidance for Antipsychotic Use and Withdrawal in Dementia

1. Background

This guidance has been written to support clinicians in primary care dealing with behavioural and psychological symptoms of dementia (BPSD). Reducing the number of antipsychotics being prescribed to manage BPSD is a national priority. Antipsychotics seem to have a limited positive effect on treating symptoms but can cause significant harm. Non pharmacological measures should be tried in the first instance wherever possible to manage BPSD. The expectation is often put on GPs that they should provide a quick drug fix for patients with troublesome BPSD, and this can lead to inappropriate prescribing. This guidance contains flowcharts to help clinicians through the decision making process when managing BPSD and gives information on where further support can be obtained.

2. Behavioural and Psychological Symptoms of Dementia (BPSD)

- People with dementia may experience a range of symptoms including agitation, aggression, hallucinations and delusions. These symptoms are collectively known as ‘behavioural and psychological symptoms of dementia’ or ‘BPSD’.
- BPSD is common in dementia and more than 90 per cent of people with dementia will experience BPSD as part of their illness.
- Sudden emergence of BPSD often has a physical trigger. Longer onset emergence can be linked to depression¹.
- Many people with BPSD will experience significant improvement or resolution of symptoms over a 4–6 week period, but BPSD may be intractable and prolonged.

3. Initial interventions for BPSD

- Carry out a physical examination, check conscious level, dehydration, infection, constipation, urinary retention, heart failure and hypoxia.
- Blood tests include the usual dementia screen, C-reactive protein (CRP) and mid-stream specimen of urine (MSU).
- Identify if the patient has delirium and treat any underlying acute medical problems e.g. urinary tract infection (UTI) (see NICE CG103: Delirium for further information)
- Review the patient and apply the PAIN approach. Manage or treat any contributory factors. If the patient is not eating or drinking adequately initiate a food and fluid chart, and check that they are not over-sedated, or have dental problems e.g. ill-fitting dentures, candida infection.

| P | Physical problems e.g. infection, pain |
| A | Activity related e.g. dressing, washing |
| I | Iatrogenic e.g. side effects of drugs such as anti-cholinergics |
| N | Noise and other environmental factors e.g. lighting, lack of stimulation² |

- Develop a care plan identifying non-drug treatments based on person-centred care.
Psychosocial interventions include:
- Exercises – gentle stretching, strength training, balance and endurance
- Creating a scrap book or similar simple craft project
- Looking at photographs or pictures from their past
- Music
- Using personal care as an opportunity for positive social interaction
- Playing specific games or doing puzzles
- Frequent short conversations
- Going for a walk

Pharmacological interventions, including antipsychotics, should only be considered as a first line option if the patient is severely distressed or there is an immediate risk of harm to the person or others.

Antipsychotic use for BPSD

Elderly people with dementia are at risk from serious and life-threatening side effects when treated with antipsychotics e.g. increased risk of stroke, small increased risk of death, parkinsonism, falls, dehydration, chest infections, ankle oedema, deep vein thrombosis/pulmonary embolism.

If psychosocial interventions have been ineffective and an antipsychotic is indicated, an atypical antipsychotic is preferred over a typical one.

Antipsychotics may be beneficial particularly to manage behavioural and psychological symptoms in patients with frontotemporal dementia (FTD).

When using antipsychotics as part of safe and good clinical practice, monitor the patient’s physical and mental health.

Use the ‘3T’ approach when initiating antipsychotics:
- Identify a specific target symptom and set up a system for monitoring the symptom
- start at a low dose and titrate upwards
- be time-limited and set a review date.

Initial supplies of antipsychotics should be for a maximum of 28 days only (acute prescription) – then review progress. Discontinuation should be the default except in extreme circumstances (see flow chart 2).

Patients with dementia currently on antipsychotics for behavioural problems who have not had a trial discontinuation in the last 3 months should have the antipsychotic reviewed in line with flowchart 2 (overleaf). There are limited circumstances when antipsychotics are justified beyond 3 months and a plan for discontinuation should be arranged.

Antipsychotics can be withdrawn from many older people with dementia, though caution is needed for people with more severe neuropsychiatric symptoms.

Antipsychotics should not be used in someone with Lewy Body Dementia (LBD) without specialist advice.
5. Pathway for a person who does not have a current antipsychotic prescription (flow chart 1)

Patient presents with BPSD and is not currently prescribed an antipsychotic

Does the patient have delirium? (short history <1 week, confusion, hallucinations, delusion with fluctuating cognition)

- **Yes**
  - Treat underlying acute medical problems e.g. UTI, chest infection, side effects of drugs, alcohol and/or drug withdrawal etc
  - Symptoms persist
    - Review patient and identify non-drug interventions (appendix 1). Implement patient specific care plan
    - Consider pharmacological interventions only if psychosocial interventions have failed – treat the predominant symptom group.
      - Severe depression / apathy: consider antidepressants if clinically indicated. e.g. citalopram 10mg once daily (max 20mg once daily)
      - Antidepressants may also help restlessness and agitation
      - Review every 4 weeks.
      - Continue to monitor patient and address any potential causes

- **No**
  - Carry out a medical review (including medication review), identify and manage/ treat possible causes and triggers
    - **P** Physical problems e.g. infection, pain, constipation, dehydration
    - **A** Activity related e.g. dressing, washing
    - **I** Iatrogenic e.g. side effects of drugs such as anti-cholinergics
    - **N** Noise and other environmental factors e.g. lighting, lack of stimulation

  - Behavioural problems resolved?
    - **Yes**
      - Review patient and identify non-drug interventions (appendix 1). Implement patient specific care plan
      - Consider pharmacological interventions only if psychosocial interventions have failed – treat the predominant symptom group.
        - Severe depression / apathy: consider antidepressants if clinically indicated. e.g. citalopram 10mg once daily (max 20mg once daily)
        - Antidepressants may also help restlessness and agitation
        - Review every 4 weeks.
        - Continue to monitor patient and address any potential causes
    - **No**
      - Psychosis / aggression / agitation: cautiously consider antipsychotics E.g. risperidone 250 micrograms twice daily (max 1mg twice daily)
      - Consider increased risk of stroke
      - Treatment effective – review after 4 weeks and attempt discontinuation
      - Treatment ineffective - discontinue
      - Seek specialist advice via NSFT (see ‘Useful contact information’)

Symptoms resolved

- **Yes**
  - Psychosis / aggression / agitation: cautiously consider antipsychotics E.g. risperidone 250 micrograms twice daily (max 1mg twice daily)
  - Consider increased risk of stroke
  - Treatment effective – review after 4 weeks and attempt discontinuation
  - Treatment ineffective - discontinue
  - Seek specialist advice via NSFT (see ‘Useful contact information’)

- **No**
  - Review every 4 weeks.
  - Symptoms do not improve
  - Discontinuing treatment
  - See flow chart 2 overleaf
  - Trial alternative antidepressant or seek specialist advice
  - Symptoms improve
  - Review patient and identify non-drug interventions (appendix 1). Implement patient specific care plan
  - Consider pharmacological interventions only if psychosocial interventions have failed – treat the predominant symptom group.
    - Severe depression / apathy: consider antidepressants if clinically indicated. e.g. citalopram 10mg once daily (max 20mg once daily)
    - Antidepressants may also help restlessness and agitation
    - Review every 4 weeks.
    - Continue to monitor patient and address any potential causes
6. Pathway for a patient with BPSD who is already taking an antipsychotic drug (flow chart 2)

Patient prescribed antipsychotics for BPSD

Review the symptoms and severity
Recently initiated patients attempt discontinuation after 4 weeks; long term patients attempt discontinuation every 3 months

Receiving a low daily dose
Box A: Example low doses
- Risperidone 0.5mg or less
- Olanzapine 2.5mg or less
- Quetiapine 25mg or less
- Aripiprazole 5mg or less
- Haloperidol 0.5mg or less
- Amisulpiride 50mg or less

Receiving a high dose (above those detailed in box A)
Reduce to half dose for two weeks
Review patient
After further two weeks

Discontinue
Discontinuation should be the default except in extreme circumstances

Symptoms resolve
Continue to monitor patient and address any potential causes

Mild to moderate symptoms
The first four weeks are the most challenging. Identify and manage/treat possible causes and triggers and implement simple non-drug interventions (appendix 1)

Extreme risk or distress
If symptoms remain severe (with associated severe risk and/or distress) and further treatment with antipsychotics is considered clinically necessary, seek specialist advice via NSFT (see ‘Useful contact information’)

Monitor for side effects and symptom progression
Monitor for signs and symptoms that may suggest a relapse and withdrawal
Monitor for signs and symptoms that may suggest a relapse and withdrawal
Monitor for signs and symptoms that may suggest a relapse and withdrawal

Further dose reduction may be required if on very high dose
7. Medication review

A medication review should consider all the medication a patient is taking, including prescribed, over the counter and complementary medicines and supplements. The risks versus the benefits should be evaluated for each medicine.

Consider:
- The indication for the medication – is it still required?
- The pharmacology of each drug – the effects may be additive e.g. anticholinergics
- Drug – drug interactions
- Drug – disease interactions
- The risk of adverse side effects e.g. falls

Medication that is most likely to cause significant harm to the patient should be prioritised and reviewed.

i) Anti-cholinergic drugs

Drugs with anti-cholinergic activity can impair cognitive function:
- Tricyclic antidepressants e.g. amitriptyline (a selective serotonin reuptake inhibitor (SSRI) e.g. citalopram is a safer option for patients with dementia)
- Anti-muscarinic drugs for urinary incontinence e.g. oxybutynin, solifenacin
- Antipsychotic drugs, especially the older phenothiazine antipsychotic drugs e.g. chlorpromazine and levomepromazine
- Anti-histamine drugs e.g. chlorphenamine, hydroxyzine
- Anti-Parkinsonian drugs especially orphenadrine, procyclidine, trihexyphenidyl
- Anti-spasmodic drugs e.g. alverine, hyoscine
- Benzodiazepines especially alprazolam, although all benzodiazepines will cause sedation and put patients at risk of falls
- Bronchodilators e.g. theophylline
- Digoxin
- Furosemide
- Opiate analgesics especially codeine, oromorph and fentanyl (all opiates can exacerbate cognitive dysfunction due to their opioid effect)²,⁷

If at all possible, these drugs should be tailed off or substituted with a safer alternative if someone has dementia. The continued use of these drugs may preclude the use of a cholinesterase inhibitor to treat dementia².

ii) Antihypertensive Drugs

Hypertension is an established risk factor for dementia, but there is also some emerging evidence that low blood pressure is associated with cognitive decline and dementia.

Blood pressure decreases as the course of dementia progresses. Patients with dementia should have their blood pressure closely monitored and their antihypertensive medication should be reduced accordingly².
iii) Non-drug interventions

- Manage or treat any contributory factors such as physical illness
- Develop a clinical care plan for simple non-drug interventions based on person-centred care. It is important to design the plan around the person’s needs, abilities and interests. Agree with the patient/carer/family a reasonable improvement goal to help measure the outcomes.

Brief psychosocial therapies help to engage people in ways that they find interesting and enjoyable. These should generally include 10–30 minutes of daily one-to-one conversation or activity based on the person’s interests, hobbies, history and ability, and feedback from their carer and/or family.

A list of possible non-drug interventions is available in appendix 1.

8. Pharmacological treatments

i) Depression

The effectiveness of pharmacological treatment for depression in people with dementia has not been established. Evidence shows positive events and exercise are effective for mild to moderate depression. For severe depression pharmacological treatment may be appropriate.

First line: Consider Citalopram 10 mg/day (max 20 mg/day if over 65)\(^1,6\). Review every 4 weeks.

Nb. Consider risk of QT interval prolongation with concomitant use of citalopram and drugs that can prolong the QT interval. ECG measurements should be considered for patients with cardiac disease, and electrolyte disturbances should be corrected before starting treatment\(^8\).

Depression and anxiety are common in dementia. It is often safer to use an antidepressant as a first line treatment before considering antipsychotic medication\(^2\).

ii) Sleep disturbance

Try implementing sleep hygiene measures, for example:

- reduce daytime napping
- increase activities during the day
- agree realistic expectations for sleep duration.

If sleep hygiene measures have failed, short term treatment (maximum 4 weeks) with a hypnotic such as zopiclone may be helpful\(^1,2,6\). However, this is only supported by anecdotal evidence\(^1\).

iii) Severe agitation, aggression and psychosis

Where all other specific interventions have been unsuccessful and symptoms are causing extreme distress or risk, a trial of pharmacological treatments specifically targeted at behavioural and psychological symptoms may be attempted.
9. Antipsychotics

i) Drug treatment should:

- have a specific target symptom – set up a system for monitoring the symptom e.g. using behavioural charts completed by carers
- start at a low dose and titrate upwards
- be time limited – set a review date

**Maintenance should be at the lowest possible effective dose, for the shortest possible time.**

The risks (e.g. increased risk of stroke, transient ischaemic attack, and changes in cognition) and benefits (small reduction in psychosis, aggression, and agitation) of antipsychotic treatment should be discussed with the patient and/or relatives and/or care staff. Any discussion should be documented in the patient notes.

If a drug is used ‘off licence’ the patient and/or relatives and/or carers should be informed and the rationale for using an ‘off licence’ drug should be documented in the patient notes².

ii) Drug choice

An atypical antipsychotic should be preferred over a typical one².

Risperidone is the only antipsychotic licensed for use in dementia. Licence indication states that risperidone should be used for no longer than six weeks before review or specialist referral⁹, locally we advise a review after 28 days. A cardiac risk assessment is recommended prior to starting an antipsychotic. Antipsychotics (except very low doses of quetiapine) are absolutely contraindicated in Parkinson’s Disease and Dementia with Lewy Bodies.

**First line: Risperidone, but not in Dementia with Lewy Bodies (DLB)**

- Start dose: 250 micrograms once or twice a day
- Commonly: 500 micrograms twice a day

It is important to work up to a therapeutically effective dose from a low starting dose.

Alternative antipsychotic drugs include olanzapine, aripiprazole and quetiapine. The evidence relating to these drugs is more limited.

iii) Treatment duration and monitoring requirements

The carers and/or family should be involved in monitoring the patient for symptom management and adverse drug reactions. Ensure the carers and/or the family are aware of the symptoms that may suggest a severe reaction, particularly neuroleptic malignant syndrome, sensitivity reactions, and development of worsening of extrapyramidal features.

A face to face review between the prescriber and the patient should be carried out at least every 4 weeks.
Limit initial quantity prescribed to 28 days.

- If symptoms fail to improve after one week the dose may need to be increased or an alternative agent tried.
- If symptoms improve – attempt to discontinue treatment after 4 weeks treatment.
- If there is a need to continue treatment beyond four weeks – seek specialist advice and follow up should be done every month initially. Another withdrawal should be attempted at three months.

Patients who have been on antipsychotics for over a year may need slower withdrawal (see table 1).

If a patient on an antipsychotic for BPSD has not had a trial discontinuation in the last 3 months, they should have the antipsychotic reviewed and stopped to assess the risks and benefits of continued treatment unless:

- The antipsychotic was prescribed for a pre-existing condition prior to a diagnosis of dementia, e.g. bipolar disorder or psychotic depression.
- The patient is under regular review by a specialist for behavioural problems. This does not include reviews solely planned to assess the on-going benefits of prescribing cholinesterase inhibitors (e.g. donepezil) to delay cognitive decline.
- There is a detailed care plan in place for ongoing antipsychotic use.

iv) Discontinuation

When withdrawing antipsychotic medication, regularly review the patient for signs and symptoms which may suggest a relapse or withdrawal symptoms e.g. nausea, vomiting, sweating and insomnia.

If the person is receiving a “low dose” proceed directly with discontinuation and monitoring.
If the person is receiving a higher dose taper the dose over at least one month:

- Reduce to half dose for two weeks
- GP review at two weeks (consider further dose reduction if necessary)
- Discontinue immediately after a further two weeks

If the patient is on a very high dose seek advice from secondary care before making any changes. The following is a guide for the most commonly used medicines, but individual patient circumstances and the views of the carer may need to be taken into consideration.

Table 1

<table>
<thead>
<tr>
<th>Drug</th>
<th>Total daily dose</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone</td>
<td>0.5mg or less</td>
<td>Stop</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1mg or less</td>
<td>Halve dose</td>
<td>Stop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 1mg</td>
<td>Halve dose</td>
<td>Halve dose</td>
<td>Stop</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>25mg or less</td>
<td>Stop</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50mg or less</td>
<td>Halve dose</td>
<td>Stop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 50mg</td>
<td>Halve dose</td>
<td>Halve dose</td>
<td>Stop</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>0.5mg or less</td>
<td>Stop</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1mg or less</td>
<td>Halve dose</td>
<td>Stop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 1mg</td>
<td>Halve dose</td>
<td>Halve dose</td>
<td>Stop</td>
</tr>
</tbody>
</table>
In some cases it may be necessary to withdraw the drug more slowly, particularly if symptoms reappear.

- Implement small decreases in dose (ensure dose reduction is possible with strengths available)
- Where the antipsychotic is given more than once daily, decrease only one dose to start with, choosing the dose where patient likely to be least affected.
- Allow sufficient time for the patient to adapt to the new dose (usually 1-2 weeks) before considering the next small reduction in dose.
- When the lowest dose has been achieved on a daily basis then administer on alternate days before stopping completely.

v) Adverse effects

Antipsychotic drugs are known to be harmful and can have severe side-effects. It is vital that any person prescribed these drugs is monitored for side-effects and progression of symptoms.

The most important adverse effects associated with antipsychotics are parkinsonism, falls, dehydration, chest infections, ankle oedema, deep vein thrombosis/pulmonary embolism, cardiac arrhythmia and stroke (highest risk in first four weeks of treatment).

Antipsychotics are also associated with increased mortality in the long term (often related to pneumonia and thrombo-embolic events) which can be caused by over-sedation and dehydration.

Weekly monitoring of sedation, fluid intake and early indicators of chest infection is strongly recommended.

Caution: antipsychotics should not be used in someone with Lewy Body Dementia (LBD) without specialist advice. Around 60% of patients with Lewy Body dementia suffer adverse consequences with antipsychotics.

**10. Useful contact information**

<table>
<thead>
<tr>
<th>NSFT Service</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access and Assessment Service</td>
<td>0300 123 1334</td>
</tr>
<tr>
<td>Integrated Delivery Team (IDT) - Ipswich</td>
<td>01473 341100</td>
</tr>
<tr>
<td>Integrated Delivery Team (IDT) - Central</td>
<td>01449 618126</td>
</tr>
<tr>
<td>Integrated Delivery Team (IDT) - Coastal</td>
<td>01473 279200</td>
</tr>
</tbody>
</table>
11. References


2. NHS Suffolk. Guidelines for antipsychotic use and withdrawal for people with dementia. November 2011


5. Antipsychotics monitoring –Maudsley guidance 11 edition


10. RCPsych Faculty for Old Age Psychiatrists
### Appendix 1: Non – drug interventions

<table>
<thead>
<tr>
<th>Challenging behaviours may result from</th>
<th>Non-drug intervention ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sleep disturbance</strong></td>
<td>• Sleep hygiene advice</td>
</tr>
<tr>
<td></td>
<td>• Increase activity during the day e.g. going for a walk, gentle stretching, strength training, balance and endurance exercise</td>
</tr>
<tr>
<td></td>
<td>• Reduce daytime naps</td>
</tr>
<tr>
<td></td>
<td>• Agree realistic expectations for sleep duration</td>
</tr>
<tr>
<td><strong>Under stimulation</strong></td>
<td>• Use activities that are personally relevant to interests or previous work. Life story documents such as ‘My Life Story’ and ‘This is me’ are useful.</td>
</tr>
<tr>
<td></td>
<td>• Use personal care as an opportunity for positive social interaction</td>
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<tr>
<td></td>
<td>• Social areas to encourage interactions.</td>
</tr>
<tr>
<td><strong>Over stimulation</strong></td>
<td>• Consider quiet time, an afternoon nap, sitting in the garden, sitting with calming music.</td>
</tr>
<tr>
<td><strong>Confusion linked to physical design of the home</strong></td>
<td>• Ensure good lighting, use of pictures and colours to find way around, clear signage to toilets, good access to personal objects, outside space, etc.</td>
</tr>
<tr>
<td><strong>Person unable to communicate their needs or requests are being ignored.</strong></td>
<td>• Be proactive with checking person’s needs at frequent intervals.</td>
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<td></td>
<td>• Use short simple sentences or statements or non-verbal gestures to indicate walking to toilet, etc.</td>
</tr>
<tr>
<td><strong>Hearing and visual difficulties</strong></td>
<td>• Check for sensory impairment.</td>
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<tr>
<td></td>
<td>• Check which is their ‘best’ ear, or if they have visual impairment on one side then approach from the other.</td>
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<tr>
<td></td>
<td>• Consider if optician/audiology appointment required (home visits possible).</td>
</tr>
<tr>
<td><strong>Repetitive behaviours</strong></td>
<td>• Use distraction e.g. playing specific games or doing puzzles, reassurance, and emotion-focused strategies.</td>
</tr>
<tr>
<td><strong>Depression and anxiety</strong></td>
<td>• Ensure resident has access to activities and is actively encouraged to participate.</td>
</tr>
<tr>
<td></td>
<td>• Promote active involvement of relatives in care.</td>
</tr>
<tr>
<td></td>
<td>• Be aware of triggers for anxiety, e.g. confined places.</td>
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</tbody>
</table>