

CARE HOMES ADVICE SHEET - MEDICINES AND FALLS RISK

Commonly prescribed drugs that can contribute to falls

This list is to raise awareness of most commonly prescribed drugs that can contribute to falls risk. It is not exhaustive.

The grading of the drugs has been adapted from the Medicines and Falls in Hospital: Guidance Sheet by John Radcliffe Hospital, Oxford, March; 2011 and approved by the British Geriatrics Society.

Key

High risk: Can commonly cause falls alone or in combination
Moderate risk: Can cause falls, especially in combination
Possibly causes falls, particularly in combination

DRUG NAME	COMMON USE (NOT EXHAUSTIVE)	EFFECTS ON FALL RISK (NOT EXHAUSTIVE)
Alfluzosin	Enlarged prostate	Drop in blood pressure on standing
Amitriptyline	Depression	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Amlodipine	Hypertension, Angina	Low blood pressure, drop in blood pressure on standing
Atenolol	Hypertension, Angina, Arrhythmia	Low blood pressure, drop in blood pressure on standing, slow heart rate
Baclofen	Muscle spasm	Sleepiness and reduced muscle tone
Bendroflumethiazide	Oedema, Hypertension	Low blood pressure, drop in blood pressure on standing and sleepiness
Betahistine	Vertigo, Tinnitus	Sleepiness
Bisoprolol	Hypertension, Angina, Heart failure	Low blood pressure, drop in blood pressure on standing, slow heart rate
Bumetanide	Oedema	Low blood pressure, drop in blood pressure on standing
Candesartan	Hypertension, Heart failure	Low blood pressure
Captopril	Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Carbamazepine	Epilepsy	Sleepiness, slow reactions, unsteadiness and lack of movement control
Carvedilol	Hypertension, Angina, Heart failure	Low blood pressure, drop in blood pressure on standing, slow heart rate
Chlordiazepoxide	Anxiety, Acute alcohol withdrawal	Drowsiness, slow reactions, impaired balance
Chlorphenamine	Allergy, Urticaria	Drowsiness, blurred vision, dizziness, lack of movement control
Chlorpromazine	Psychosis	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Chlortalidone	Oedema, Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Cinnarazine	Nausea, Vomiting, Vertigo, Tinnitus	Sleepiness
Citalopram	Depression	Drop in blood pressure on standing, confusion
Clomipramine	Depression, Phobia	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Clonazepam	Epilepsy	Drowsiness, slow reactions, impaired balance
Codeine	Pain	Sleepiness, slow reactions, impaired balance, confusion
Dantrolene	Muscle spasm	Sleepiness, reduced muscle tone
Diazepam	Insomnia, Anxiety	Drowsiness, slow reactions, impaired balance
Digoxin	Heart Failure	Slow heart rate
Diltiazem	Hypertension, Angina	Low blood pressure, drop in blood pressure on standing
Donepezil	Dementia	Fainting, dizziness
Dosulepin	Depression	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Doxazosin	Hypertension	Low blood pressure, drop in blood pressure on standing
Doxepin	Depression, Pruritus in eczema	Drowsiness, blurred vision, drop in blood pressure on standing
Duloxetine	Depression, Anxiety	Drop in blood pressure on standing, sleepiness, dizziness, confusion
Enalapril	Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Felodipine	Hypertension, Angina	Low blood pressure, drop in blood pressure on standing
Fluoxetine	Depression	Dizziness, balance disorder
Fluphenazine	Psychosis	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Flurazepam	Insomnia	Drowsiness, slow reactions, impaired balance
Furosemide	Oedema, Hypertension	Low blood pressure, drop in blood pressure on standing
Gabapentin	Chronic pain	Drop in blood pressure on standing, sleepiness, unsteadiness
Galantamine	Dementia	Fainting, dizziness
Glyceryl trinitrate (GTN)	Angina	Drop in blood pressure on standing
Haloperidol	Psychosis	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Hydroxyzine	Pruritus	Drowsiness, blurred vision, lack of movement control
Irbesartan	Hypertension	Low blood pressure

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DRUG NAME	COMMON USE	EFFECTS ON FALL RISK
Isosorbide mononitrate	Angina	Drop in blood pressure on standing
Lercanidipine	Hypertension	Low blood pressure, drop in blood pressure on standing
Lisinopril	Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Lorazepam	Insomnia, Anxiety	Drowsiness, slow reactions, impaired balance
Lormetazepam	Insomnia	Drowsiness, slow reactions, impaired balance
Losartan	Hypertension, Heart failure	Low blood pressure
Metolazone	Oedema, Hypertension	Low blood pressure, drop in blood pressure on standing and sleepiness.
Metoprolol	Hypertension, Angina, Arrhythmia	Low blood pressure, drop in blood pressure on standing, slow heart rate
Mirtazapine	Depression	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Morphine	Pain	Sleepiness, slow reactions, impaired balance, confusion
Moxonidine	Hypertension	Low blood pressure, drop in blood pressure on standing and sleepiness
Nicorandil	Angina	Drop in blood pressure on standing
Nifedipine	Hypertension, Angina	Low blood pressure, drop in blood pressure on standing
Nitrazepam	Insomnia	Drowsiness, slow reactions, impaired balance
Nortriptyline	Depression, Neuropathic pain	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Olanzapine	Psychosis, Agitation	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Olmesartan	Hypertension	Low blood pressure
Oxazepam	Anxiety	Drowsiness, slow reactions, impaired balance
Oxybutinin	Urinary incontinence	Drowsiness, dizziness and blurred vision
Paroxetine	Depression	Drop in blood pressure on standing, confusion
Perindopril	Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Phenobarbital	Epilepsy	Sleepiness, slow reactions, unsteadiness and lack of movement control
Phenytoin	Epilepsy	Unsteadiness and lack of movement control
Pramipexole	Parkinson's disease	Delirium and drop in blood pressure on standing
Prazosin	Hypertension	Drop in blood pressure on standing
Pregabalin	Epilepsy, Neuropathic pain	Sleepiness
Prochlorperazine	Nausea, Vomiting, Vertigo	Movement disorder in long term use
Promethazine	Allergy, Urticaria	Drowsiness and blurred vision
Propranolol	Hypertension, Angina, Arrhythmia	Low blood pressure, drop in blood pressure on standing, slow heart rate
Quetiapine	Psychosis, Agitation	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Ramipril	Hypertension, Heart failure	Low blood pressure, drop in blood pressure on standing
Risperidone	Psychosis, Agitation	Drop in blood pressure on standing, sleepiness, slow reflexes, loss of balance
Rivastigmine	Dementia	Fainting, dizziness
Ropinirole	Parkinson's disease	Delirium and Drop in blood pressure on standing
Selegiline	Parkinson's disease	Drop in blood pressure on standing
Sertraline	Depression	Drop in blood pressure on standing, confusion
Solifenacin	Urinary incontinence	Drowsiness, dizziness and blurred vision
Sotalol	Arrhythmia	Low blood pressure, drop in blood pressure on standing, slow heart rate
Tamsulosin	Enlarged prostate	Drop in blood pressure on standing
Telmisartan	Hypertension	Low blood pressure
Temazepam	Insomnia	Drowsiness, slow reactions, impaired balance
Timolol eye drops	Glaucoma	Drop in blood pressure on standing, slow heart rate
Tolterodine	Urinary incontinence	Drowsiness, dizziness and blurred vision
Trazodone	Depression, Anxiety	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Trimipramine	Depression	Drop in blood pressure on standing, drowsiness, slow reactions, impaired balance
Venlafaxine	Depression	Drop in blood pressure on standing, sleepiness, dizziness, confusion
Verapamil	Hypertension, Angina, Arrhythmia	Low blood pressure, drop in blood pressure on standing
Zolpidem	Insomnia	Drowsiness, slow reactions, impaired balance
Zopiclone	Insomnia	Drowsiness, slow reactions, impaired balance

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Summary

Falls and fall-related injuries are a common and serious problem for older people. People aged 65 and older have the highest risk of falling, with 30% of people older than 65 and 50% of people older than 80 falling at least once a year.

Residents who have fallen are at high risk of a repeat fall.

Key Points

The more risk factors a resident has, the more likely they are to fall. Medication is only one risk factor. Others include problems with walking/moving; not using mobility aids correctly; using poor footwear; cognitive problems; behavioural problems; other medical conditions affecting balance, co-ordination and movement.

Some medicines can increase a person's risk of falling because of the way they work or due to side effects such as dizziness, sedation, confusion, dehydration, visual impairment (blurred vision, dry eyes), vestibular damage (tinnitus, deafness) and low blood pressure including orthostatic hypotension.

Older people are more vulnerable to the side effects of medications because of age related changes to the liver, kidney, heart and central nervous system.

Falls may be due to recent medication changes, but are usually caused by medicines that have been given for a long time without appropriate review.

The more medicines a person takes, the greater the risk of falls. The significance of side effects is likely to be increased if medicines with similar side effects are being taken.

Recommendations

In residents taking medicines known to contribute to falls, a medication review can play an important role in preventing falls. The aim of the review should be to modify or withdraw the drug, if this is not possible close monitoring is required.

Inform the GP if there are any changes to a resident's mobility, balance, coordination or alertness as this increases their risk of falls.

Residents at high risk of falling (e.g. with recurrent, unexplained or injurious falls) should be considered for specialist referral and multidisciplinary intervention.

Note

The list of medicines included in this document is to raise awareness of most commonly prescribed drugs that can contribute to falls risk. It is not exhaustive. It is the clinician's responsibility to consider other drugs, drug interactions or factors not listed here.

References / Further Information

PrescQIPP Bulletin 87. Care homes - Medication and falls 2.1, December 2014

Falls: assessment and prevention of falls in older people. NICE Clinical Guideline 161. June 2013

<http://www.nice.org.uk/Guidance/CG161>

Acknowledgements

Adapted from:

- Herts Valleys CCG Medicines and Falls Risk in Care Homes (2017)
- Chiltern & Aylesbury Vale CCG, Guidance 4
- Medicines and Falls Risk in Care Homes (2014); New Devon CCG Caring for Care Homes Guidance Sheet 05 Drugs and Falls v5_2017

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