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Common Medications in Elderly

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This chapter talks about the most prescribed medications for geriatric patients and their possible side effects. Once aware, it is easier to identify problems arising due to medication at the earliest and modify/eliminate the medicine accordingly. A timely change in medication is immensely beneficial for geriatric patients and can avoid any unforeseen malady. A list of commonly prescribed medicines is given below:

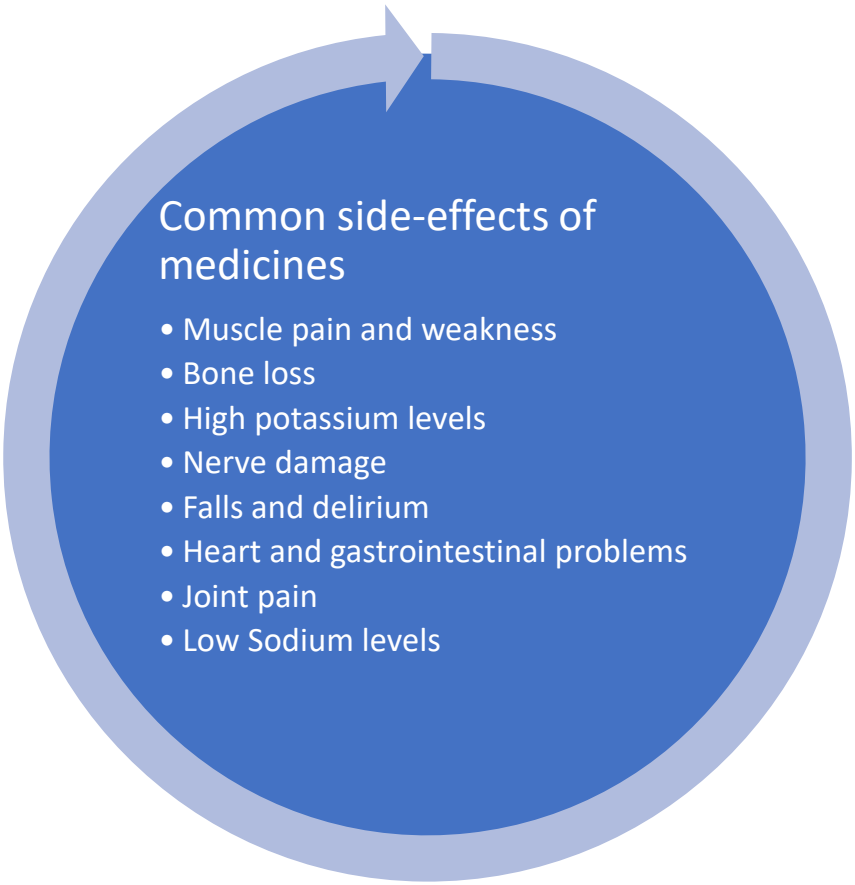
Sr. No	Name of medicine	Side Effect observed
1.	Amlodipine	Hypotension, light headedness, pedal edema
2.	Telmisartan	Pedal oedema, tachycardia, vision changes
3.	Cilnidipine	Flushing, palpitation, fatigue, abdominal pain
4.	Aspirin	Gastritis, pain abdomen
5.	Metformin	Diarrhea, nausea, Metabolic acidosis,
6.	Glimepiride	Weight gain, hypoglycemia, allergy
7.	Furosemide	Diuresis, hypotension, dry mouth, increased thirst
8.	Metoprolol	Dizziness, depression, bloating, fatigue
9.	Atorvastatin	Gastritis, joint pain, memory loss, confusion
10.	Teneligliptin	Hypoglycemia, constipation, Upper Respiratory infection
11	Benadryl, lorazepam	Risk of falls, confusion

During aging there are structural and functional changes which affect all organ systems. This results in reduced homeostatic capacity. During resting conditions, the functional capacity may be maintained. However, the reserves are reduced leading to increased vulnerability during stress. Changes in hepatic and renal function lead to an increased volume of distribution of fat-soluble drugs. There is reduced clearance of water soluble and fat-soluble drugs. So, there is prolongation in half-life elimination. As a result, there is increased sensitivity to drugs. So, an understanding of pharmacodynamics will improve the quality of prescribing medication.

Below is a list of some more common medications which need to be used with caution:

Name of the medicine	To be used with caution
Aspirin for primary prevention of cardiovascular disease and colorectal cancer	Use with caution in patients ≥ 70 years. Risk of major bleeding from aspirin increases markedly in older age.
Dabigatran Rivaroxaban	Use with caution for treatment if venous thromboembolism (VTE) or atrial fibrillation in patients ≥ 75 years. Greater risk of bleeding than warfarin in patients ≥ 75 years.
Prasugrel	Use with caution in patients ≥ 75 years. Increased risk of bleeding; benefit may offset risk in highest-risk older adults (e.g., those with previous myocardial infarction or diabetes mellitus)
Antipsychotics Carbamazepine Diuretics	May worsen or cause syndrome of inappropriate antidiuretic hormone secretion or hyponatremia

Mirtazapine Oxcarbazepine Serotonin–norepinephrine reuptake inhibitors (SNRIs) Selective serotonin reuptake inhibitors (SSRIs) Tricyclic antidepressants (TCAs) Tramadol	Monitor sodium level closely when starting or changing dosages
Dextromethorphan/quinidine	Limited efficacy in patients with behavioral symptoms of dementia (does not apply to treatment of pseudobulbar affect). May increase risk of falls and concerns with clinically significant drug interactions.
Trimethoprim-sulfamethoxazole	Use with caution in patients on angiotensin-converting enzyme (ACE) inhibitors or angiotensin II receptor blockers (ARBs) and decreased creatinine clearance; may increase risk of hyperkalaemia in these patients.



Adverse drug event is more common among elderly. Hence monitoring is essential for them. Some common medication needing special care are, Warfarin, insulin injections, phenytoin, opioid analgesics and dogoxin.

Interaction between various medicines is not well documented in elderly. Commonly seen are non-steroidal anti-inflammatory drugs (NSAIDs) affecting antihypertensives. Next common drug is aspirin/NSAID use in those with history of peptic ulcer disease without gastroprotection.

Drugs	Interacting Disease State
Diltiazem or verapamil	NYHA class III or IV heart failure
Tricyclic antidepressants (TCAs)	Dementia, narrow angle glaucoma, cardiac conduction abnormalities, prostatism, prior history of urinary retention
Chlorpromazine, Clozapine, flupentixol, zuclopenthixol *	History of prostatism or previous urinary retention
Antipsychotics (i.e., other than quetiapine or clozapine)	Parkinsonism, Lewy Body disease
Anticholinergics/antimuscarinics	Dementia, delirium, chronic cognitive impairment narrow angle glaucoma, chronic prostatism
Prochlorperazine or metoclopramide	Parkinsonism
Antimuscarinic bronchodilators	History of narrow angle glaucoma or bladder outflow obstruction
Non-selective beta blocker	History of asthma requiring treatment
COX-2 NSAID (celecoxib, etoricoxib, parecoxib)	Cardiovascular disease
Oral bisphosphonate	Gastrointestinal disease
Oestrogens	History of breast cancer or venous thromboembolism (VTE)
Thiazolidinediones (Pioglitazone, Rosiglitazone)	Heart Failure

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