

When To Pop or Drop: Medication Reduction In Older Adults With An Intellectual Disability

By

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Mortality and Morbidity Among Older Adults With ID

Many live as long as general population

Longevity with ID is progressively increasing

Cause of death strikingly similar to general population

Cardiovascular, Respiratory and Neoplastic Diseases most prominent

Suggested clinical practices be implemented to lessen impact of age related diseases

Highlight important
considerations of safe medication
use in older adults regardless of ID

Geriatric population is a fragile age group from a pharmaceutical perspective



Commonly Used Drugs in Seniors that Require Renal Dosing

- Neurontin
- Lyrica
- Bactrim
- Macrobid
- Metformin
- Zantac
- Digoxin
- Dilantin
- Cipro
- Levaquin
- Celexa
- Aricept
- Effexor
- Namenda
- Actonel
- Fosamax
- Remeron
- Seroquel
- Allopurinol

Renal Dosing Guidelines Must be Used in Older Adults

Example:

Metformin is contraindicated if SrCr > 1.5 mg/dl in males or > 1.4 mg/dl in females

Potential toxicities with drug accumulation:

Lactic Acidosis, a rare but serious form of metabolic acidosis with a 50% mortality rate

Drugs Used In Older Adults That Can Cause: Dementia, Alzheimer-like symptoms, Cognitive Impairment

- Beta-blockers (Atenolol)
- Benzodiazepines (Valium)
- Antihistamines (Benadryl)
- Tricyclic-antidepressants (Amitriptyline)
- Anticonvulsants (Neurontin)
- Muscle Relaxants (Baclofen)
- Sedative Hypnotics (Ambien)
- Statins (Lipitor)

Reasons Drugs Cause Dementia are Two Fold:

1. Direct affect on central nervous system
2. Accumulation in body to toxic levels

Directs effects on CNS and Brain cause a variety of symptoms

- Mimic Alzheimer's
- Agitation
- Memory loss
- Delirium
- Hallucination

STATINS AND COGNITIVE IMPAIRMENT

- Second most common side effect after muscle pain and weakness
- Statin induced memory loss
- Transient Global Amnesia reported to MedWatch (FDA adverse-event reporting system)

NSAIDs



Nonsteroidal Anti-Inflammatory Drugs:

- Commonly used by seniors for joint stiffness, arthritic and muscle pain
- Available Rx (Celebrex, Ibuprofen, Naproxen)
- Available OTC (Advil, Aleve)
- Often an ingredient of pain, cold and sleep OTC medications
- Dangerous drug class for older Adults

PROBLEMS WITH NSAIDs FOR SENIORS

- GI bleeding and death
- Platelet dysfunction/prolonged bleeding time
- Blood pressure elevation
- Increased risk of heart attacks and strokes
- FDA warning recently strengthened
- Most cases of fatal GI bleeds occur in older adults

PROTON PUMP INHIBITORS (PPIs)



Proton Pump Inhibitors

- Ranked 2nd for worldwide sales
- Powerful acid suppression in the stomach
- Approved for use in: GERD, duodenal/gastric ulcer, dyspepsia, heartburn, esophagitis, Zollinger-Ellison syndrome and to prevent GI bleeds with NSAID use.
- Studies shown 50% of people on PPIs don't have condition the drug was designed to treat
- Tested and approved for Short-term treatment of GERD (4-8 weeks)

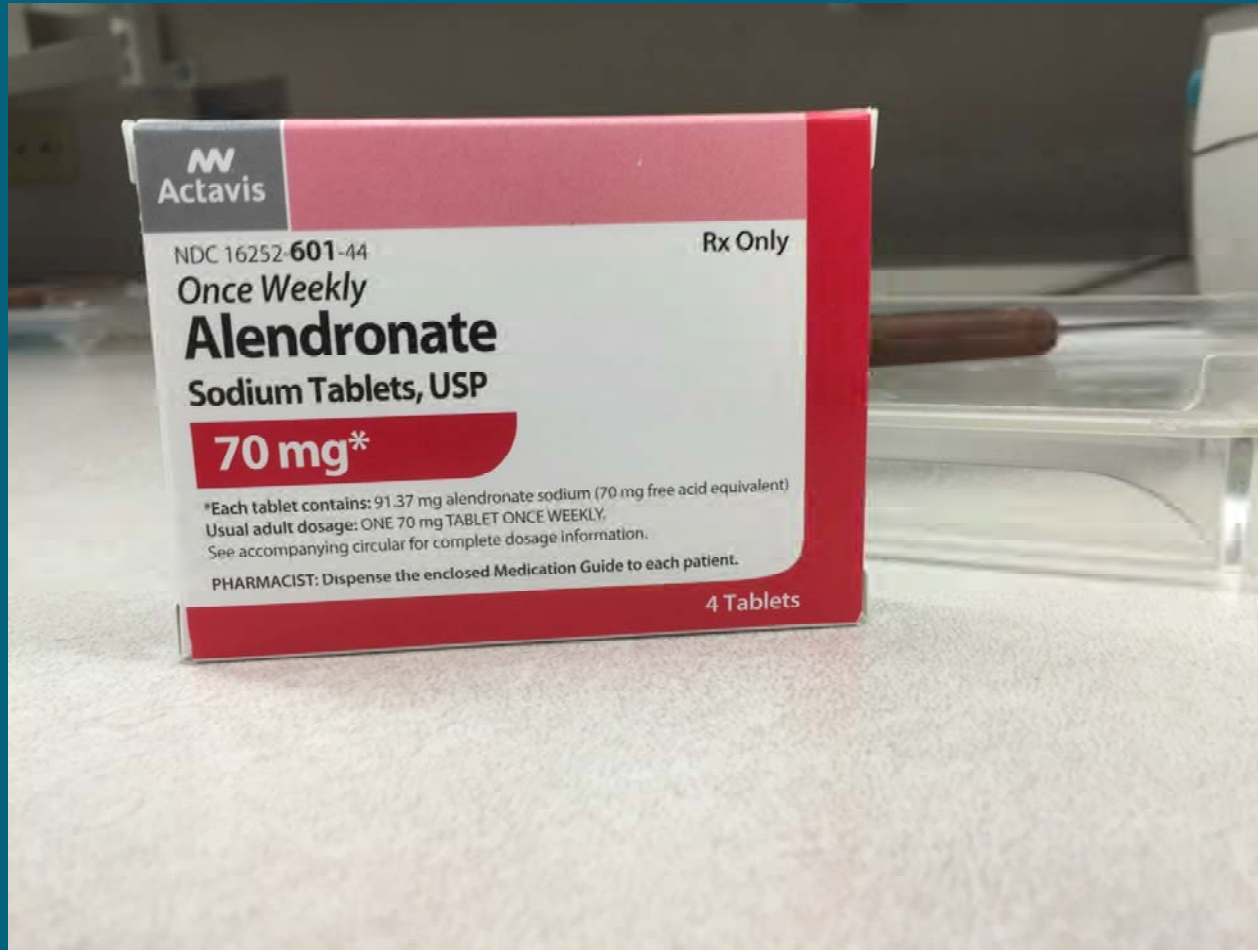
LONG-TERM USE OF PPIs BY OLDER ADULTS IS ASSOCIATED WITH:

- Vitamin B12 deficiency
- Bone fractures
- Hypomagnesemia
- Increased risk of pneumonia
- Increased risk of C. difficile
- Increased risk of adenocarcinoma
- Interactions with over a hundred other drugs
- Very difficult to reduce/stop due to rebound hypersecretion of acid

Non-drug alternatives to PPIs for GERD with Simple Diet and lifestyle Changes:

- Raise the head of the bed
- Weight loss if overweight
- Eating smaller & less spicy meals
- Eating earlier in the day
- Avoid carbonated drinks & citric juices
- If smoker, quit
- Chew sugar-free gum after meals

BISPHOSPHONATES



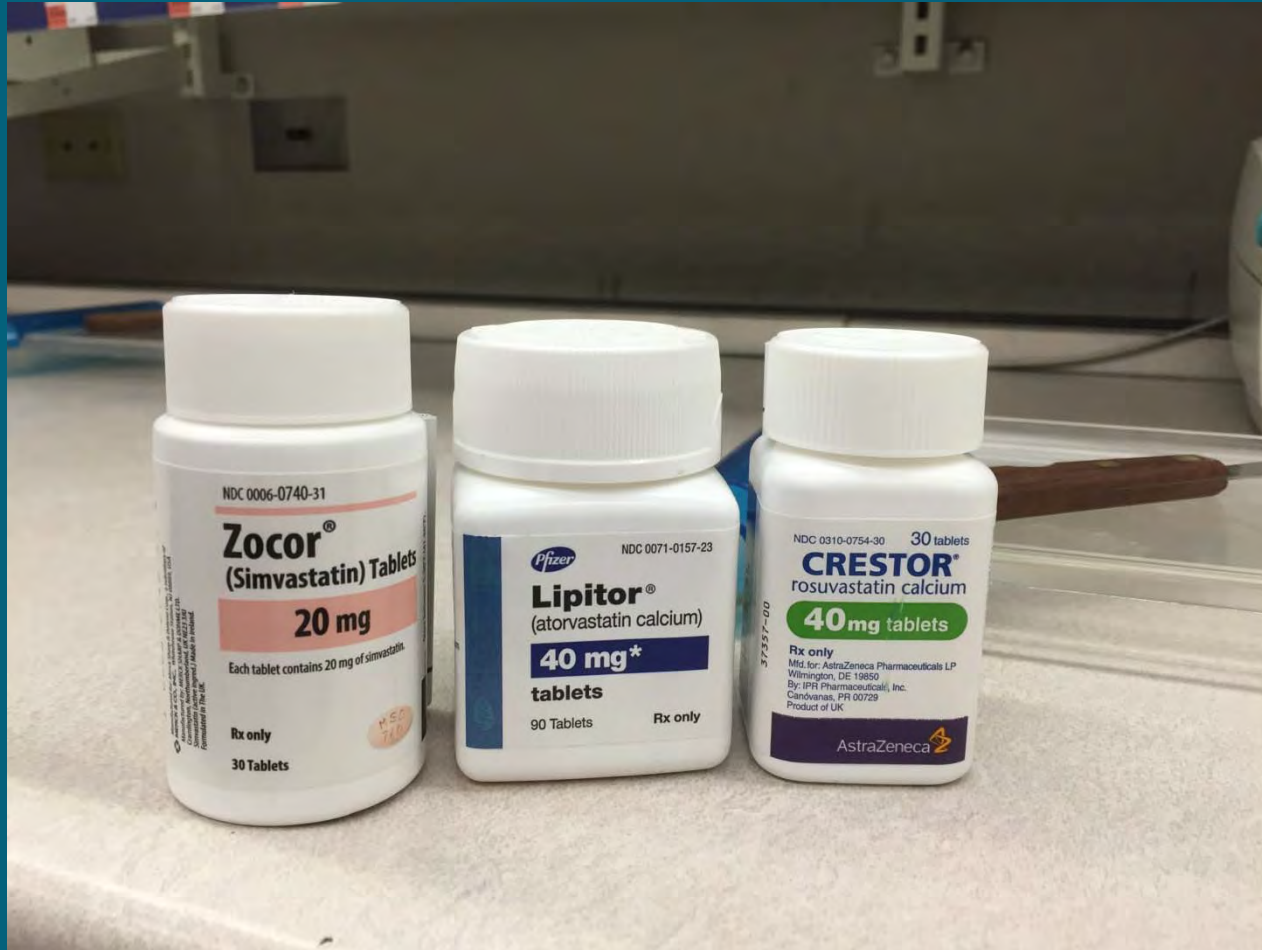
BISPHOSPHONATES

- Widely prescribed and marketed to older adults
- Examples (Fosamax, Boniva, Actonel, Reclast)
- Often featured in magazine/TV ads as cure-all for osteoporosis
- Advertisements fail to highlight the very serious and irreversible adverse effects
- Long-term effects and duration of therapy is undefined by the manufacturers

ADVERSE EFFECTS OF BISPHOSPHONATES

- Severe, chronic and permanent pain in muscles, joints and bones
- Esophagitis, heartburn, acid reflux, ulcerations and cancer of the esophagus
- Atypical bone fracture of the femur
- Osteonecrosis of the Jaw

STATINS



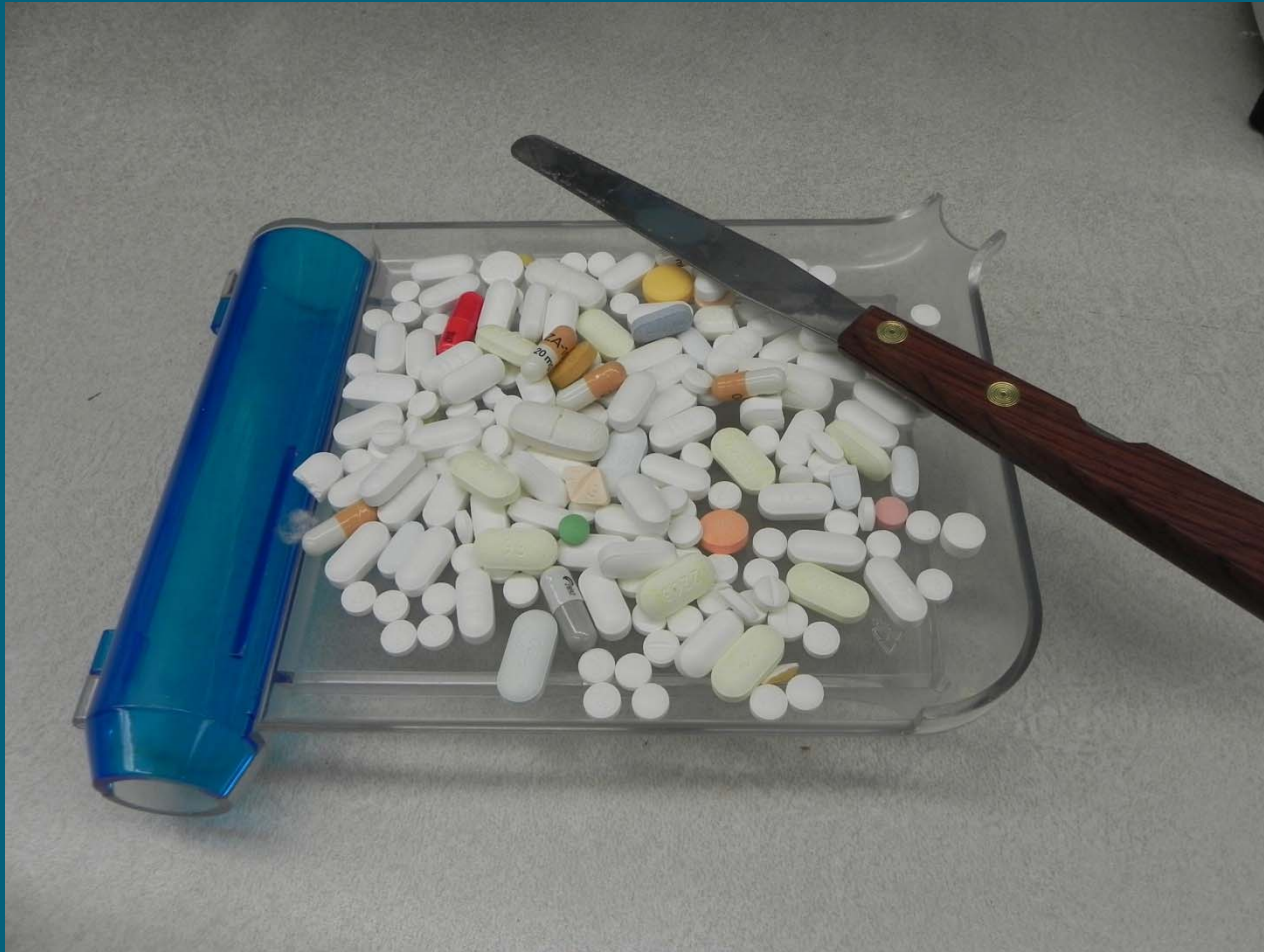
STATINS

- Top selling class in the US and Atorvastatin (Lipitor) is the top selling Rx drug
- This class endorsed by American College of Cardiology, American Heart Association and others
- Often promoted by Internists that everyone over 40 yrs. should be on a statin
- But are statins as safe and useful in older adults as promoted by Big Pharma?

ADVERSE EFFECTS OF STATINS

- Muscle pain, fatigue and weakness
- Rhabdomyolysis, kidney damage/failure
- Cognitive issues (memory loss, forgetfulness, amnesia, memory impairment, confusion and depression)
- Increased risk of developing diabetes
- Hemorrhagic stroke
- According to Danish researchers, 80+/- wo CVD, statins may increase all-cause mortality
- Many drug interactions (statins metabolized by liver enzyme CYP3A4)

POLYPHARMACY AND DRUG INTERACTIONS IN OLDER ADULTS



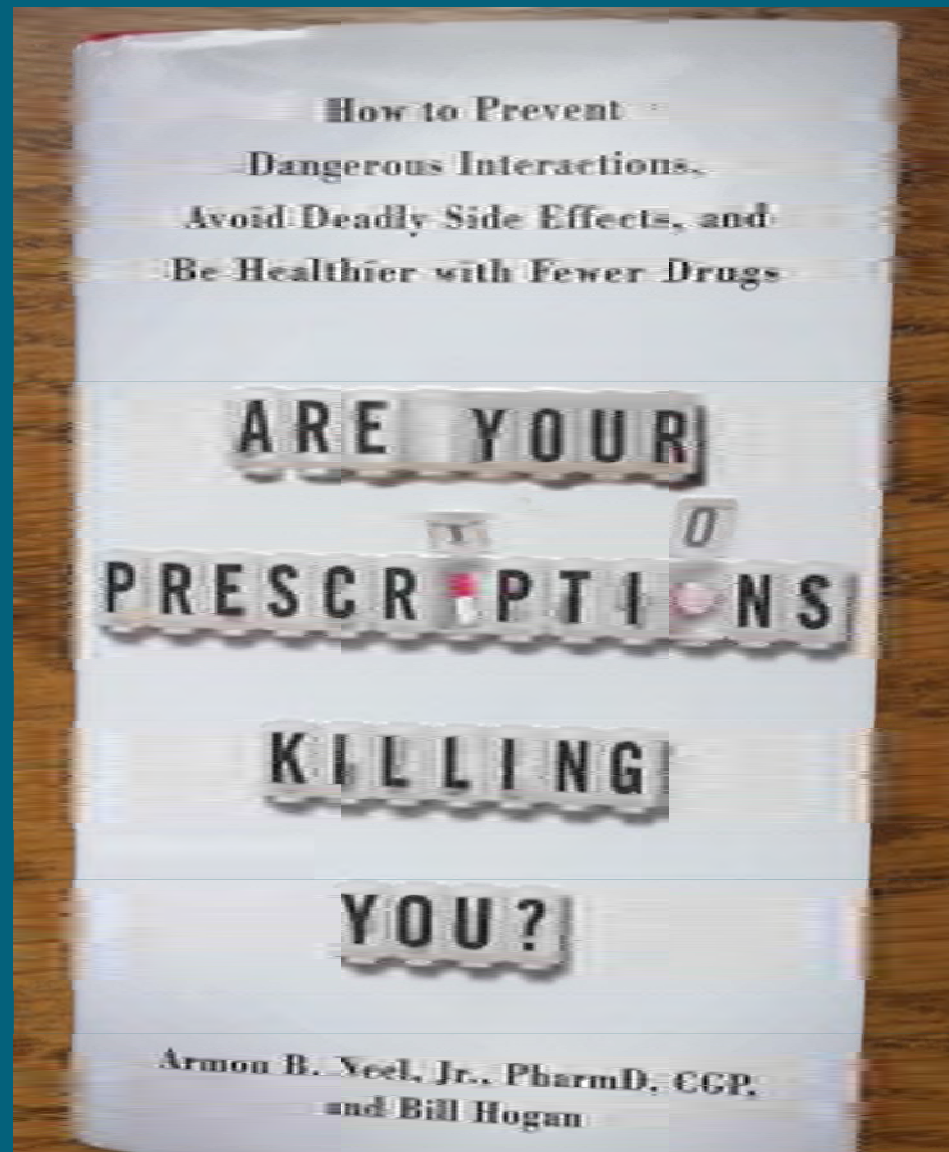
DRUGS INDICATED FOR ALZHEIMER'S DISEASE

- EXAMPLES: Aricept, Razadyne, Namenda and Exelon
- According to the Federal Omnibus Budget Reconciliation Act (OBRA), continued use of these medications should be re-evaluated as disorder progresses to advanced stages.
- Adverse reactions: hallucinations, agitation, depression, confusion, drowsiness, GI, Cholinergic, skin reactions and Stevens-Johnson syndrome.
- Consider the Risks versus Benefits

MEDICATION REDUCTION IN OLDER ADULTS WITH OR WITHOUT ID

- This overview is a rough guide to refocus attention of some commonly used drugs
- When complaints or symptoms of discomfort are expressed, think potential drug related causes
- When older adults with ID are unable to articulate discomfort, think about the potential drug related causes.

REFERENCE BOOK



REFERENCES

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