PREVENTING FALLS BY DEPRESCRIBING OPIOIDS AND OTHER HIGH-RISK MEDICATIONS

KOREY KENNELTY PHARMD, MS, PHD, BCGP
ASSISTANT PROFESSOR, GERIATRIC PHARMACIST
COLLEGE OF PHARMACY, CARVER COLLEGE OF MEDICINE
UNIVERSITY OF IOWA
SEPTEMBER 3, 2020

Thanks to Jeff Reist PharmD, BCPS who helped develop this presentation

DISCLOSURES

Funding from:

CDC; 5U01CE002961

NIH/NHLBI; 5R01HL139918

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

OBJECTIVES

Review polypharmacy, de-escalating therapy, and deprescribing

Discuss potential high-risk medications to deprescribe

Work through three case studies

- Steps of deprescribing
- Resources for deprescribing

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

WHAT IS POLYPHARMACY?

More drugs being prescribed or taken than are clinically appropriate in the context of a patient's comorbidities - Zarowitz et al. Pharmacotherapy (2005)

The administration of many drugs at the same time or the administration of an excessive number of drug – World Health Organization (2004) definition

Patients visiting multiple pharmacies to obtain medications – Gillette et al. RSAP (2015)

HEALTH OUTCOMES ASSOCIATED WITH POLYPHARMACY

- Systemic review of 50 studies of community dwelling older adults
- Articles assessed for quality of adjustment for confounding
- Studies rated as “good” in terms of adjustment for confounding found association between polypharmacy and:
  - Falling, falls outcomes and fall risk factors
  - Adverse drug events
  - Hospitalizations
  - Mortality
  - Declines in function
  - Declines in cognition

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

Fried TR, et al., JAGS 2014

CDC STEADI TOOLKIT

https://www.cdc.gov/steadi/materials.html

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Falls Are a Major Threat for Your Patients

1 in 4 people 65 and older falls each year.

- Every 20 minutes, an older adult dies from a fall.
- 1 out of 5 falls causes a serious injury, such as a head trauma, or a fracture.
- Less than half of the Medicare beneficiaries who fell in the previous year talked to their healthcare provider about it.
- More than 3 million older adults are treated in emergency departments for nonfatal fall injuries each year.
- Medicare costs for fall injuries total over $31 billion annually. Hospital costs account for two-thirds of the total.

The good news— as a healthcare provider, your efforts can prevent many of these injuries!

STEADI Stopping Elderly Accidents, Deaths & Injuries

STEADI Stopping Elderly Accidents, Deaths & Injuries

Resources

[Materials for Providers](#)

Assessments, fact sheets, case studies, and additional clinical tools

[Training and Continuing Education](#)

Training and resources to help providers put fall prevention strategies into practice

[Materials for Patients](#)

Educational materials and brochures for older adults

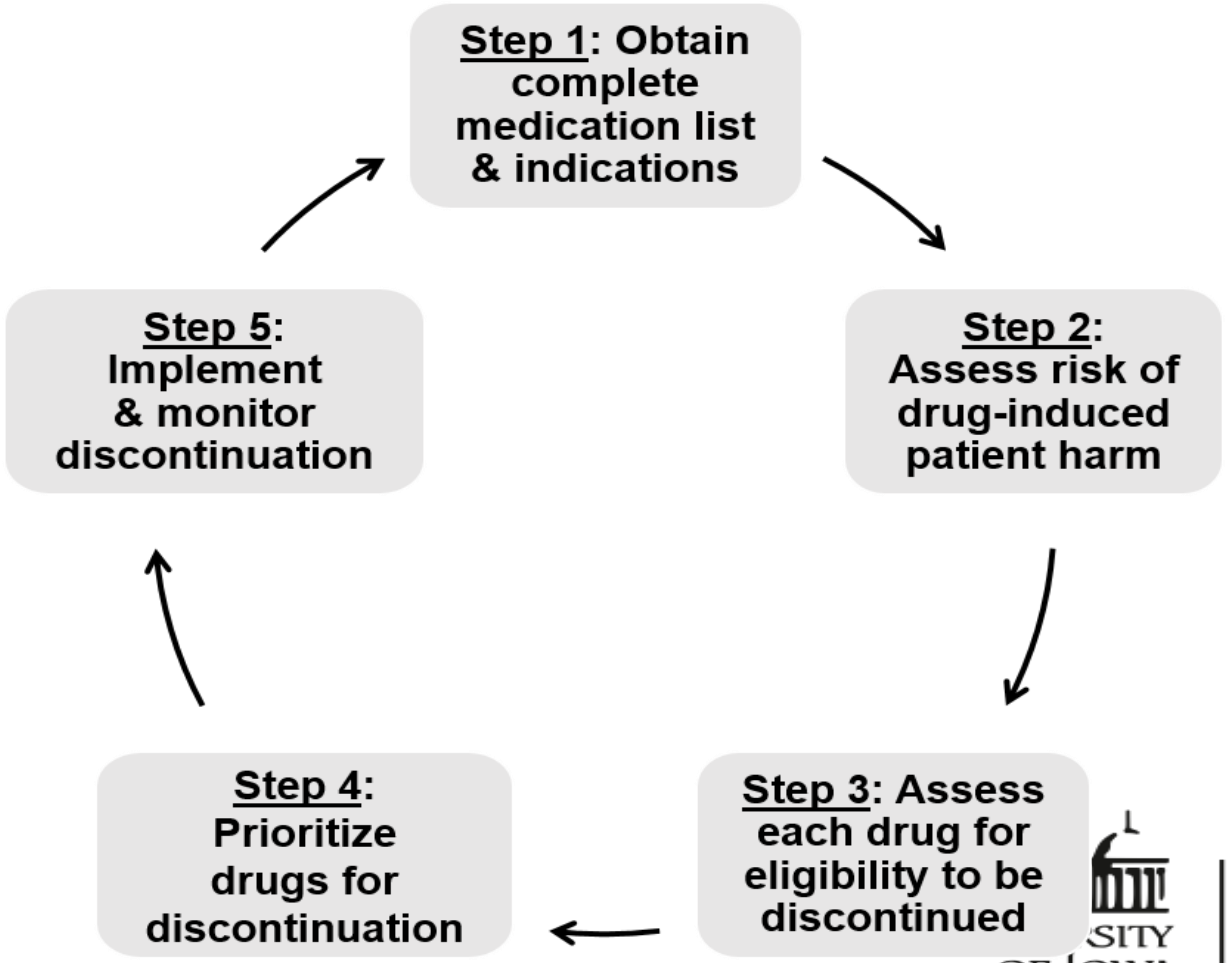
[Success Stories](#)

Stories about fall prevention programs and successes

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

PROCESS OF DEPRESCRIBING



Scott IA et al. JAMA Internal Med 2015

PROCESS OF DEPRESCRIBING

Obtain accurate and complete current medication list

Determine intended use for each medication

Ascertain and assess risk of medications

- Drug factors
    - Number of medications
    - High risk medications
- Patient factors
    - Age >80
    - Cognitive impairment
    - Multiple comorbidities
    - Multiple providers
    - Adherence concerns
    - Substance use disorder

PROCESS OF DEPRESCRIBING (CONT.)

Look at each drug for eligibility for deprescribing

- No current indication
- Non-adherence
- Result of prescribing cascade
- Risk of harm outweighs potential benefit
- Symptoms for medication have resolved
- Medication no longer effective for disease or symptom
- Medication for primary prevention unlikely to confer benefit in patient's remaining lifespan
- Medication contributing to unacceptable "pill burden"

PROCESS OF DEPRESCRIBING (CONT.)

Prioritize medications for deprescribing

- Greatest harm
- Least benefit
- Patient willingness
- Minimize to one medication at a time if possible

Implement deprescribing plan

- Develop tapering plan with monitoring for withdrawal effects and return of symptoms for which medication was being used
- Communicate plan with patient and provider to obtain input and agreement with plan
- Initiate deprescribing plan
- Follow up with patient at agreed upon intervals

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

POSSIBLE MEDICATIONS FOR DEPRESCRIBING

- Benzodiazepines
- Antipsychotics
- Proton pump inhibitors
- Z-drugs (sedatives)
- Antihyperglycemics
- Antihypertensives
- Statins
- Aspirin/ antiplatelets
- Anticholinergics
- Opioids
- Bisphosphonates
- NSAIDS
- Ferrous sulfate
- Laxatives
- Vitamins
- Cholinesterase inhibitors and memantine

WHAT IS THERAPY DE-ESCALATION?

Describes a situation where the goal may not be total discontinuation of a medication but rather reduction of intensity of therapy for a given condition

Examples

Reduction of the dose of an antihypertensive medication due to change in blood pressure goal due to age, other comorbidities or reduced ability to tolerate side effects

Stepping down of therapy for heartburn from a proton pump inhibitor (omeprazole) to a H2RA (famotidine)

WHAT IS DEPRESCRIBING?

The systematic process of identifying and discontinuing drugs in instances in which existing or potential harms outweigh existing or potential benefits within the context of an individual patient's care goals, current level of functioning, life expectancy, values, and preferences

Example

Tapering to discontinuation of a sedative (zolpidem) due to risks of adverse events and lack of evidence for effectiveness for long-term use

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

Scott IA et al. JAMA Internal Med 2015

CASE: MB

MB is a 79-year-old male retired teacher

Recently widowed, lives alone in 2-story home

HTN, Hx MI, chronic neck and back pain (injuries), COPD

Current pain medication regimen

- Oxycodone/APAP 5/325 one tab three to four times a day
- Ibuprofen 600 mg TID PRN (uses 1-2 tablets per day)

Tried but stopped gabapentin due to significant ADRs

Does not drink alcohol

CASE: MB

Oxycodone/APAP use has escalated over the past year from 1 -2 tablets daily to four tablets most days

- Has taken this for last 4-5 years

Ibuprofen has decreased from 3-4 tablets daily to 1-2 tablets daily

CASE: MB

Chief Concerns

- Lack of pain control which limits gardening and swimming which he enjoyed
- Lack of energy/motivation and now is more isolated in house
- Quit going to church recently despite life-long attender
- Reporting frequent falls
    - A recent fall when getting out of bed aggravated pain
- Poor sleep quality
    - Hard time falling asleep and only sleeps 1-2 hours at a time at night
    - Frequent naps during the day in recliner

MB: LABS/ASSESSMENTS TODAY

Lytes WNL

eGFR 65

TSH 3.74

A1c 6.0

AST 21

ALT 23

MoCA 28/30

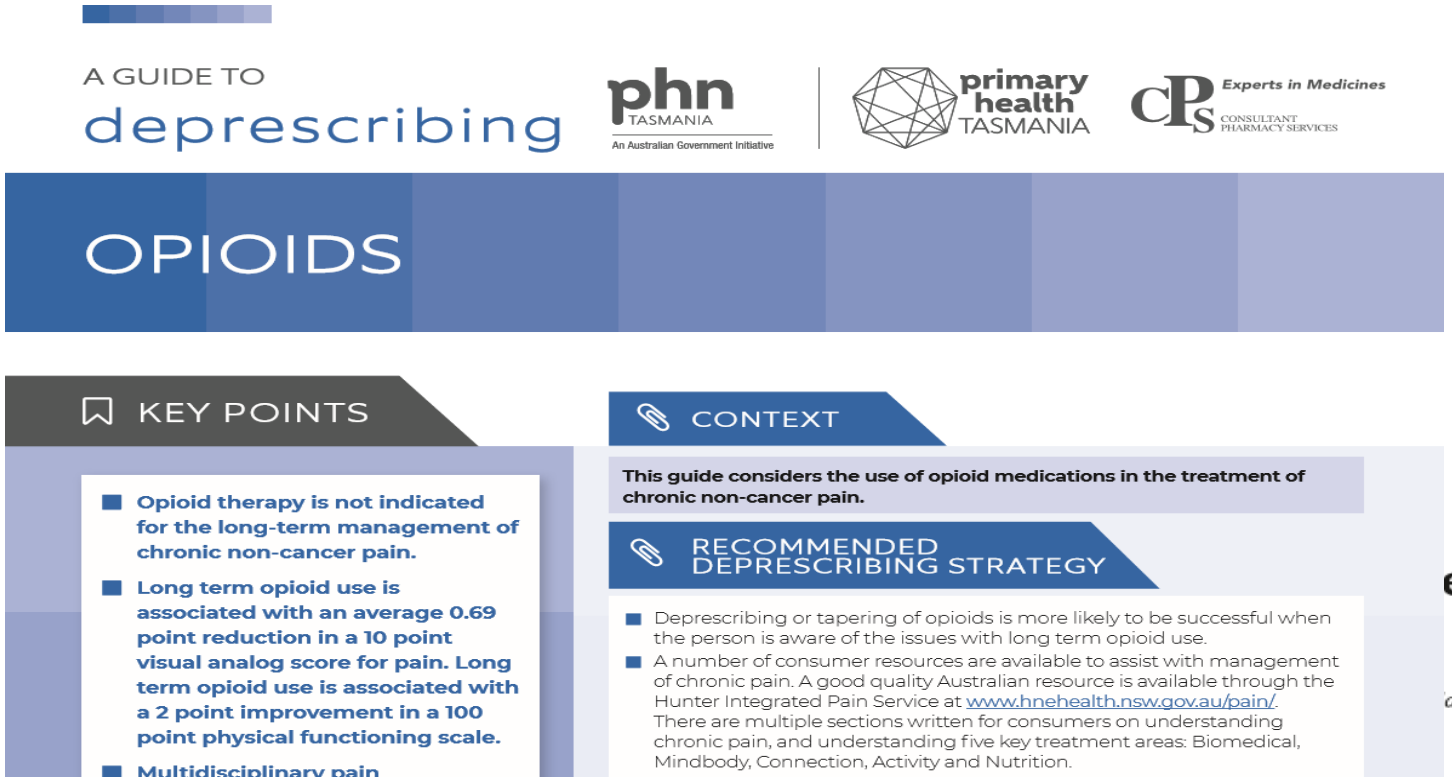
GDS 9

Pain 8/10

CANDIDATE FOR DEPRESCRIBING OPIOID?

On-line resources to help

- Primary Health
  https://www.primaryhealthtas.com.au/resources/deprescribing-resources/



ege of
armacy
d. Real excellence. Real impact.

BENEFIT VERSUS HARM

Favours Continuing Medication ← → **Favours Deprescribing Medication**

Main Benefits

- Short term pain relief

Main Harms

- Mortality, Respiratory failure, Falls, Fractures, Poor sleep, Endocrine/ Immune issues

Increased Benefit

- Short term use for acute pain

Reduced Harms

- Functionally independent and robust condition

Decreased Benefits

- Long term use (>8 weeks)

Increased Harms

- Presence of benzodiazepines or other respiratory depressants
- Oral Morphine Milligram equivalent of 100mg or more
- Oral Morphine Milligram equivalent of 50mg or more in frail elderly patients
- Low body weight
- Frailty

CHECKLIST

Fall Risk Factors

Patient _____

Date _____

Time _____ ☐ AM ☐ PM

Fall Risk Factor Identified	Present?		Notes
FALLS HISTORY			
Any falls in past year?	☒ Yes	☐ No	
Worries about falling or feels unsteady when standing or walking?	☒ Yes	☐ No	
MEDICAL CONDITIONS			
Problems with heart rate and/or arrhythmia	☐ Yes	☐ No	
Cognitive impairment	☒ Yes	☐ No	
Incontinence	☐ Yes	☐ No	
Depression	☒ Yes	☐ No	
Foot problems	☐ Yes	☐ No	
Other medical problems	☐ Yes	☐ No	
MEDICATIONS (PRESCRIPTIONS, OTCs, SUPPLEMENTS)			
Psychoactive medications	☐ Yes	☐ No	
Opioids	☐ Yes	☐ No	
Medications that can cause sedation or confusion	☒ Yes	☐ No	
Medications that can cause hypotension	☐ Yes	☐ No	
GAIT, STRENGTH & BALANCE			
Timed Up and Go (TUG) Test ≥12 seconds	☐ Yes	☐ No	
30-Second Chair Stand Test: Below average score based on age and gender	☐ Yes	☐ No	
4-Stage Balance Test: Full tandem stance <10 seconds	☐ Yes	☐ No	
VISION			
Acuity <20/40 OR no eye exam in >1 year	☐ Yes	☐ No	
POSTURAL HYPOTENSION			
A decrease in systolic BP ≥20 mm Hg, or a diastolic BP of ≥10 mm Hg, or lightheadedness, or dizziness from lying to standing	☒ Yes	☐ No	
OTHER RISK FACTORS (SPECIFY BELOW)			
	☐ Yes	☐ No	

STEADI Stopping Elderly Accidents, Deaths & Injuries

https://www.cdc.gov/steadi/materials.html

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

USE OF LONG-TERM OPIOIDS FOR CHRONIC PAIN

Opioids are not first line for management of chronic pain

Evidence for opioids for chronic pain is weak

Multidisciplinary pain management programs utilizing behavioral therapy, physical therapy, exercise result in better quality of life than use of opioids

Treating co-morbidities such as depression can help to augment pain relief strategies

INDICATIONS FOR DEPRESCRIBING OPIOIDS

Patients with a lack of demonstrable clinical effectiveness

Lack of evidence for effectiveness for chronic pain

The existence of serious adverse effects

Patients who are stable and have a decreased level of pain

Evidence of misuse, illegal or unsafe behaviors

PATIENT ENGAGEMENT

Use of motivational interviewing to get patient to “buy in” to the decision to deprescribe

Patient education of risks of long-term opioid therapy

Communication with patient of the tapering plan

- Include withdrawal symptom information

Recommendation of non-pharmacological and non-opioid pharmacological options for pain relief

RISK OF LONG-TERM OPIOID THERAPY

ADVERSE EFFECT	FREQUENCY WITH OPIOID (%)	FREQUENCY WITH PLACEBO (%)	RELATIVE RISK
Constipation	41	11	3.6
Nausea	32	12	2.7
Sedation	29	10	3.3
Vomiting	15	3	6.1
Dizziness	20	7	2.8
Itching	15	7	2.2
Dry Mouth	13	9	1.5
Discontinuation of treatment (any reason)	24	15	1.4
Any adverse effect	80	56	1.4

THE UNIVERSITY OF IOWA | College of Pharmacy

Real world. Real excellence. Real impact.

Deyo RA et al. BMJJ 2015;350

OPIOID DISCONTINUATION SYNDROMES

Opioid withdrawal can develop within hours of drug cessation

- Unlikely to be life threatening but can be very uncomfortable

Signs and symptoms of withdrawal may include:

- Gastrointestinal symptoms (e.g., abdominal cramping, nausea, vomiting, diarrhea)
- Musculoskeletal symptoms (e.g., myalgias, arthralgias, muscle spasms)
- Anorexia, yawning, lacrimation, salivation, rhinorrhea, piloerection, insomnia, anxiety, irritability, dysphoria
- Sympathetic hyperactivity such as diaphoresis, tachycardia, fever, mydriasis or mildly elevated blood pressures

In people who have significant comorbidities, withdrawal should be medically managed

TAPERING STRATEGIES

Rate and duration of taper dependent on

- Duration of therapy
- Starting dose
- Indication for tapering
- Patient willingness/acceptance

Goal is to limit withdrawal symptoms and avoid patient distress

TAPERING STRATEGIES

Should have alternative therapies in place

Flexibility is important!

- It is ok to slow or temporarily stop the taper and reassess
- The goal is to EVENTUALLY eliminate the opioid NOT to see how fast we can eliminate it

ALTERNATIVE THERAPIES TO CONSIDER

Physical Therapy consult

Treat underlying depression

- Counseling
- Initiate pharmacotherapy with duloxetine (Cymbalta®) and acetaminophen

Initiate acetaminophen carefully with the taper to avoid toxicity since his opioid contains acetaminophen

What about ibuprofen and other NSAIDs?

- Increased cardiac risk
    - Especially with history of MI
- Increase risk of GI bleeding and kidney toxicity

HOW TO TAPER MB'S OPIOID?

He is taking oxycodone/APAP 5/325 up to 4 tablets per day

A slow taper is indicated due to

- Patient's age
- Length of therapy (about 5 years)
- Lack of immediate danger (respiratory depression not a factor)
- Allow time to have alternative therapies start and kick-in

Taper by 10-25% every month

- Taking 40 mg /day so 4-10 mg/month reduction is reasonable
- This medication available in 5 mg dosage forms
- A reduction of 5 mg would be reasonable to start taper

TAPERING SCHEDULE: MONTH ONE

Reduce oxycodone 5/APAP 325 to one Tablet three times/day (AM-Noon-PM)

Discontinue ibuprofen

Initiate duloxetine 30 mg daily at bedtime

Initiate acetaminophen 325 mg one tablet three times a day (AM-Noon-PM)

Follow-up in 2 weeks

TAPERING SCHEDULE

Schedule for Tapering of _____								
Week 1 _____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly Dose
Morning								
Noon								
Afternoon								
Evening								
Week 2 _____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly Dose
Morning								
Noon								
Afternoon								
Evening								
Week 3 _____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly Dose
Morning								
Noon								
Afternoon								
Evening								
Week 4 _____	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Weekly Dose
Morning								
Noon								
Afternoon								
Evening								

OF IOWA | College of Pharmacy

Real world. Real excellence. Real impact.

CDC; 5U01CE002961 (PIs: Casteel, Kennelty)

TWO WEEK FOLLOW-UP

Assess for withdrawal symptoms

- GI, muscle pain, etc. (see previous slide on withdrawal syndrome)

Assess for pain control

Assess for side effects from duloxetine

- Drowsiness or insomnia (adjust dose time if needed), nausea, dry mouth,

Increase duloxetine to 60 mg daily if tolerated

TAPERING SCHEDULE: MONTH TWO

Reduce oxycodone 5/APAP 325 to one tablet two times/day (AM and PM)

Continue duloxetine 60 mg daily at bedtime

Increase acetaminophen to 325 mg one tablet twice a day (AM-PM) and two tablets once a day at noon)

Follow-up in one month

TAPERING SCHEDULE: MONTH THREE

Reduce oxycodone 5/APAP 325 to one tablet once a day (PM)

Continue duloxetine 60 mg daily at bedtime

Increase acetaminophen to 325 mg two tablets three times a day (AM-Noon-PM)

Follow-up in one month

- If all is well at that time, discontinue oxycodone/APAP
- Continue duloxetine and acetaminophen

CASE: XR

XR is an 87-year-old female residing in ALF x 5 years

HTN, MCI, Type 2 DM, OA, anxiety, depression, frequent falls

Current medication regimen

- Lisinopril 20 mg daily (HTN)
- Metformin 500mg twice daily (DM-2)
- Acetaminophen 1000mg twice daily (OA)
- Lorazepam 0.5mg twice daily (anxiety)

CASE: XR

Started on lorazepam when her husband passed away 10 yrs ago

- Meant to be short term

Chief concerns currently

- Daytime sedation, lack of motivation
- Worsening confusion throughout the day
- Falls at least once per week – minimal injury to date

XR: LABS/ASSESSMENTS TODAY

Lytes WNL

eGFR 56

TSH 3.74

A1c 7.5

MoCA 22/30 (8 months ago)

BP 130/76 (today)

Pulse 80 (today)

USE OF BENZOS AND Z-DRUGS

Enhance the effect of the neurotransmitter gamma-aminobutyric acid (GABA) receptor

- Commonly used to treat sleeping disorders and anxiety problems

Range from short-acting, intermediate-acting, long-acting benzodiazepines

- triazolam → alprazolam, lorazepam → diazepam

Z-Drugs

- zolpidem, zaleplon, eszopiclone

Diem SJ, et al. Journal of gerontology & geriatric research. (2014);

RISKS OF BENZOS AND Z-DRUGS

Multiple studies have evaluated the association between benzodiazepines and falls

Exposure in older adults have been associated with several negative health consequences:

- Worsening depression, cognition, and physical function

Almost 80% of older adults treated with benzo therapy continue for > 2 years

- Cause psychological dependence, which contributes to difficulties with discontinuation

De Jong MR, et al. Therapeutic Advances in Drug Safety. (2013).

IS XR A CANDIDATE FOR DEPRESCRIBING HER BENZODIAZEPINE?

On-line resources to help

- Medstopper
  https://medstopper.com/
- Primary Health
  https://www.primaryhealthtas.com.au/resources/deprescribing-resources/
- Canadian deprescribing network
  https://www.deprescribingnetwork.ca/

deprescribing.org | Benzodiazepine & Z-Drug (BZRA) Deprescribing Algorithm

February 2019

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

- Other sleeping disorders (e.g. restless legs)
- Unmanaged anxiety, depression, physical or mental condition that may be causing or aggravating insomnia
- Benzodiazepine effective specifically for anxiety
- Alcohol withdrawal

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

Recommend Deprescribing

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

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)

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.

DISCONTINUATION SYNDROMES

ANXIETY SYMPTOMS		DISTORTED PERCEPTIONS	MAJOR INCIDENTS (MAINLY WHEN HIGH DOSES ARE STOPPED ABRUPTLY)
PSYCHOLOGICAL	PHYSICAL		
■ Anxiety ■ Panic attacks ■ Insomnia ■ Poor memory ■ Depression ■ Paranoia ■ Intrusive memories ■ Cravings ■ Nightmares ■ Excitability ■ Agoraphobia ■ Social phobia ■ Obsessions ■ Rage, aggression ■ Irritability	■ Agitiation ■ Tremor ■ Headache ■ Weakness ■ Dizziness ■ Nausea ■ Vomiting ■ Diarrhoea ■ Constipation ■ Palpitations ■ Rashes ■ Tingling, numbness, altered sensation ■ Fatigue ■ Flu-like symptoms	■ Hypersensitivity to sound, light, touch, taste ■ Abnormal body sensation e.g. itching, pain, stiffness, blurred vision, paraesthesia, muscle twitching, tinnitus, burning sensations ■ Feeling self or world to be abnormal (depersonalisation or derealisation)	■ Fits (1-2% of patients) ■ Delirium (rare) ■ Transient hallucinations (visual, tactile, auditory) or illusions (rare) ■ Psychosis (very rare)

BENZODIAZEPINE TAPERING

Withdrawal symptoms may appear in 1-2 days for short-acting and 2-4 days for long-acting BDZs

Symptoms may persist for weeks

TAPERING STRATEGIES

Rate and duration of taper dependent on

- Duration of therapy
- Starting dose
- Indication for tapering
- Patient willingness/acceptance

Goal is to limit withdrawal symptoms and avoid patient distress

TAPERING STRATEGIES

Should have alternative therapies in place

Flexibility is important!

- It is ok to slow or temporarily stop the taper and reassess
- The goal is to EVENTUALLY eliminate the benzo NOT to see how fast we can eliminate it

ALTERNATIVE THERAPIES TO CONSIDER

What has been tried in the past?

Identify unmet needs

- Treat underlying conditions
    - Pain
    - Depression
    - Selective serotonin reuptake inhibitor (SSRI) and serotonin-norepinephrine reuptake inhibitor (SNRI) medications
    - Behavioral therapy
- Identify precipitants
    - Loneliness
    - Overstimulation

HOW TO TAPER XR'S BENZODIAZEPINE?

Currently taking lorazepam 0.5 mg twice daily for a total of 1 mg a day

~25% taper every two weeks, and if possible, 12.5% reductions near end and/or planned drug-free days

Need to consider dosage strengths available:

Lorazepam is available in 0.5 mg, 1 mg, 2 mg

TAPERING SCHEDULE: STEP ONE

Reduce lorazepam dose to 0.25 mg in AM and 0.5 mg in the PM

- 25% reduction

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP TWO

Reduce lorazepam to 0.25 mg in the AM and 0.25 mg in the PM

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP THREE

Reduce lorazepam to 0.125 mg in the AM and 0.25 mg in the PM

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP FOUR

Reduce lorazepam to 0.125 mg in the AM and 0.125 mg in the PM

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP FIVE

Reduce lorazepam to 0.125 mg in the PM

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP SIX

Reduce lorazepam to 0.125 mg every other evening

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks – Possible discontinuation

POST TAPER MONITORING

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

CASE: AB

AB is an 82-year-old female residing in ALF with husband

HTN, Type 2 DM, Alzheimer's Dementia

Current medication regimen

- Lisinopril 10 mg daily (HTN)
- Glyburide 10 mg daily (DM-2)
- Quetiapine 75 mg twice a day

CASE: AB

Was started on quetiapine at home prior to ALF admission

Husband was unable to manage her behaviors which included:

- Wandering at night
- Occasionally physically aggressive with husband (hitting and scratching with cares)

Chief concerns currently

- Sedation with limited activity other than sitting in chair
- Dizziness when standing which resulted in several falls with minimal injury

AB: LABS/ASSESSMENTS TODAY

Lytes WNL

eGFR 50

TSH 3.74

A1c 6.2

MoCA 12/30 (6 months ago)

BP 110/68 (today)

Pulse 78 (today)

Should consider therapy de-escalation by discontinuation of glyburide!

CANDIDATE FOR DEPRESCRIBING HER ANTIPSYCHOTIC?

On-line resources to help

- Medstopper
  https://medstopper.com/
- Primary Health
  https://www.primaryhealthtas.com.au/resources/deprescribing-resources/
- Canadian deprescribing network
  https://www.deprescribingnetwork.ca/

ANTIPSYCHOTIC USE FOR BEHAVIORAL & PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD)

Non-pharmacological therapy, particularly person-centered interventions that address the precipitants of the symptoms, is often equally or more effective than antipsychotics in many people with BPSD

Antipsychotics are considerably less effective for some types of behavioral problems than others (e.g. wandering, calling out, sexual disinhibition)

Most guidelines recommend to limit antipsychotics for BPSD to most severe situations and for short duration

RISKS OF ANTIPSYCHOTICS FOR DEMENTIA

Increased risk of falls

- Studies show increased risk range from 25-79%

Increased mortality and increased risk of stroke

- Increased relative risk of death between approximately 54 and 70%
- Absolute increased risk of 1-2% per year; NNH 50-100
- Antipsychotics have a Black Box Warning due to increased risk of death when used in older adults for BPSD

Ann Pharmacother 2012;46:917-928
JAMA Intern Med 2015;175:450-452
JAMA psychiatry.2015;72(5):438-45

TAPERING STRATEGIES

Rate and duration of taper dependent on

- Duration of therapy
- Starting dose
- Indication for tapering
- Patient willingness/acceptance

Goal is to limit withdrawal symptoms and avoid patient distress

TAPERING STRATEGIES

Should have alternative therapies in place

Flexibility is important!

- It is ok to slow or temporarily stop the taper and reassess
- The goal is to EVENTUALLY eliminate the antipsychotic NOT to see how fast we can eliminate it

INDICATIONS FOR DEPRESCRIBING ANTIPSYCHOTICS WITH DEMENTIA

Patients with a lack of demonstrable clinical effectiveness

The existence of serious adverse effects

Patients who are stable and have diminished behaviors

- Dementia may have progressed beyond the stage with behaviors

All patients who have not yet tried safer pharmacological and non-pharmacological strategies

- These should have been tried first!

WHY DEPRESCRIBE IF SYMPTOMS ARE CONTROLLED?

The natural history of most BPSD is a waxing and waning of severity in response to

- Precipitants (clinical and environmental factors)
- Disease progression

Study by Brodaty et al reported that 76% of participants remained off antipsychotic treatment 12 months after cessation

- Minimal change in measures of BPSD severity 6 months after cessation

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

Innovation in Aging. 2017;1 (suppl_1):1066.

PATIENT ENGAGEMENT

Use of motivational interviewing to get patient to “buy in” of caregivers to the decision to deprescribe

Caregiver education of risks of antipsychotic therapy for BPSD

Communication with all caregivers/concerned other of the tapering plan

- Include monitoring for return of target symptoms

Recommendation of non-pharmacological and safer pharmacological options for symptom relief

WHAT TO EXPECT WITH TAPER OF ANTIPSYCHOTIC

Studies report many individuals can have antipsychotics safely discontinued without worsening of behavioral symptoms

A 2018 Cochrane review reported that antipsychotic discontinuation may have little or no effect on overall cognitive function and may not adversely affect quality of life

Predictors of successful discontinuation antipsychotics

- Lower daily doses
- Lower baseline severity of behavioral and psychological symptoms of dementia

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

The Cochrane database of systematic reviews. 2018;3:Cd007726
Lancet Neurology. 2009;8: 151 –157

DISCONTINUATION SYNDROMES

Return of target symptoms is possible

- Anxiety, agitation, insomnia restlessness

Autonomic symptoms

- Nausea, vomiting, diarrhea, myalgia

Slow tapering will help to limit discontinuation syndromes

ALTERNATIVE THERAPIES TO CONSIDER

What has been tried in the past?

Identify unmet needs

- Treat underlying conditions
    - Pain
    - Depression
- Identify precipitants of behaviors
    - Noise or excessive activity
    - Loneliness
    - Overstimulation

HOW TO TAPER MB'S ANTIPSYCHOTIC?

She is taking quetiapine 75 mg twice a day

Little guidance as to speed of taper

- 25-50% dose reduction every 2 weeks is common strategy
- Increase speed of taper if adverse effects present

Taking 150 mg per day so 50 mg is around 33% reduction

Need to consider dosage strengths available

Quetiapine is available in 25 mg, 50 mg, 100 mg, 200 mg, 300 mg, 400 mg tablets

TAPERING SCHEDULE: STEP ONE

Reduce quetiapine to 50 mg twice a day

- 33% reduction

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP TWO

Reduce quetiapine to 25 mg in the AM and 50 mg in the PM

- 25% reduction

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP THREE

Reduce quetiapine to 25 mg in the AM and 25 mg in the PM

- 33% reduction

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

TAPERING SCHEDULE: STEP FOUR

Reduce quetiapine to 25 mg in the PM

- 50% reduction

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

Follow-up in 2 weeks

- Discontinue at that time

POST TAPER MONITORING

Monitor for target symptoms every day and document

- Quantitively
- Qualitatively

Assess for physical and environmental precipitants

- Address unmet needs

TAKE HOME POINTS

- Look at medication regimens of your patients at every visit and be skeptical of the continued utility of medications which are of higher risk in the older adult
- Avoid the preconceived notion that "*they will never agree to discontinuing that one*"
- Taper medications slowly…it is not a race
- Use alternative therapies that may not have been adequately attempted in the past or may not have been used appropriately
- Use available deprescribing tools for guidance

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

Thank you!

korey-kennelty@uiowa.edu

jeffrey-reist@uiowa.edu

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.

REFERENCES

Fried TR, O'Leary J, Towle V, Goldstein MK, Trentalange M, Martin DK. Health outcomes associated with polypharmacy in community dwelling older adults: a systematic review. J Am Geriatr Soc 2014 Dec; 62(12):2261-72.

Scott IA, Hilmer SN, Reeve E et al. Reducing Inappropriate Polypharmacy The Process of Deprescribing. JAMA Inten Med 2015 May; 175(5):827-34.

Deyo RA, Von Korff M, Duhrkoop D. Opioids for low back pain.BMJJ 2015; 350:g6380 doi:10.1136/bmjj.g6380.

Gillespie LD, Robertson MC, Gillespie WJ, Sherrington C, Gates S, Clemson LM et al Interventions for preventing falls in older people living in the community. Cochrane Database Syst Rev 2012; 9: CD007146. doi: 10.1002/14651858. CD007146.

Hill KD, Wee R. Psychotropic drug-induced falls in older people: a review of interventions aimed at reducing the problem. Drugs Aging 2012; 29: 15–30.

REFERENCES

Oderda LH, Young CV, Pepper GA. Psychotropic-related hip fractures: meta-analysis of first generation and second generation antidepressant and antipsychotic agents. Ann Pharmacother 2012; 46: 917-928.

Fraser L, Lui K, Naylor KL et al Falls and fractures with atypical antipsychotic medication use: a population-based cohort study. JAMA Intern Med 2015; 175(3): 450-452.

Chatterjee S, Chen H, Johnson ML, Aparasu RR. Risk of falls and fractures in older adults using atypical antipsychotic agents: a propensity score-adjusted, retrospective cohort study. Am J Geriatr Pharmacother 2012; 10(2): 83-94.

Maust DT, Kim HM, Seyfried LS, Chiang C, Kavanagh J, Schneider LS, et al Antipsychotics, other psychotropics, and the risk of death in patients with dementia: number needed to harm. JAMA psychiatry.2015;72(5):438-45

Van Leeuwen E, Petrovic M, van Driel ML, De Sutter AI, Vander Stichele R, Declercq T, et al Withdrawal versus continuation of long-term antipsychotic drug use for behavioural and psychological symptoms in older people with dementia. The Cochrane database of systematic reviews. 2018;3:Cd007726.

REFERENCES

Ballard, C. Hanney, M.L., Theodoulou, M., et al The dementia antipsychotic withdrawal trial (DART-AD):long-term follow-up of a randomised placebo-controlled trial. Lancet Neurology. 2009;8: 151 –157.

Brodaty H, Jessop T, Harrison F, Cations M, Shell A, Chenoweth L. Deprescribing antipsychotics in long term care residents with neuropsychiatric symptoms and dementia. Innovation in Aging. 2017;1 (suppl_1):1066.

The University of Iowa | College of Pharmacy

Real world. Real excellence. Real impact.