Heart Disease Community of Practice Series 3

De-prescribing cardiac and other medications: palliative care in people with advanced heart failure

Project ECHO
Palliative Care - Canada
BY Pallium Canada

Host: **Holly Finn, Pallium Canada**
Presenter: **Morgan Krauter, NP, CCN(C)**

Date: **April 30th 2025**

Territorial Honouring

The Palliative Care ECHO Project

The Palliative Care ECHO Project is a 5-year national initiative to cultivate communities of practice and establish continuous professional development among health care providers across Canada who care for patients with life-limiting illness.

Stay connected: www.echopalliative.com

The Palliative Care ECHO Project is supported by a financial contribution from Health Canada. The views expressed herein do not necessarily represent the views of Health Canada.

Health Canada Santé Canada

Project ECHO Palliative Care - Canada BY Pallium Canada

Introductions

Host

Holly Finn, PMP
Senior Manager of Program Delivery, Pallium Canada

Presenter

Morgan Krauter, NP, DN(C), CCCN(C)
Nurse Practitioner Lead, Heart Function Program
Royal Victoria Regional Health Centre, Barrie, ON
Adjunct Faculty Member, Lawrence S. Bloomberg Faculty of Nursing, University of Toronto

Introductions

Panelists

Dr. Caroline McGuinty, MD FRCPC
Cardiologist, Advanced Heart Failure and Transplantation, Cardiac Palliative Care
University of Ottawa Heart Institute
Assistant Professor, University of Ottawa

Drew Stumborg, RN
Saskatchewan Health Authority

Dr. Michael Slawnych, MD FRCPC
Clinical Assistant Professor
Department of Cardiology, St Paul's Hospital
University of British Columbia

Shannon Poyntz, NP-PHC, MN
Nurse Practitioner, Supportive Care

Dr. Lynn Straatman, MD FRCPC
Clinical Assistant Professor, UBC
Department of Medicine (Cardiology and Palliative Care)
Department of Pediatrics (Adolescent Health)
Medical Director, Cardiac Function Clinic

Disclosure

Relationship with Financial Sponsors:

Pallium Canada

- Not-for-profit
- Funded by Health Canada
- Boehringer Ingelheim supports Pallium Canada through an in-kind grant to expand interprofessional education in palliative care.

Disclosure

This program has received financial support from:

- Health Canada in the form of a contribution program
- Pallium Canada generates funds to support operations and R&D from Pallium Pocketbook sales and course registration fees
- An educational grant or in-kind resources from Boehringer Ingelheim.

Facilitator/ Presenter/Panelists:

- Holly Finn: employed at Pallium Canada.
- Dr. Leah Steinberg: Pallium Canada (education material), HPCO (clinical advisory committee, educator).
- Morgan Krauter: Novartis, Alnylam, Pfizer (speaker fees); Alleviant (consulting fees).
- Dr. Michael Slawnych: Novartis.
- Dr. Caroline McGuinty: Servier (consulting fees), Novartis (speaker fees).
- Dr. Lynn Straatman: Servier, Novartis, Astra Zeneca, BI, Medtronic, Pfizer, Eli Lilly, Bayer, Merck (clinical trials).
- Shannon Poyntz: None to disclose.
- Drew Stumborg: None to disclose.

Disclosure

Mitigating Potential Biases:

- The scientific planning committee had complete independent control over the development of program content

Welcome and Reminders

- Please introduce yourself in the chat!
- Your microphones are muted. There will be time during this session for questions and discussion.
- Please use the Q&A function to ask questions.
- Add comments or to let us know if you are having technical difficulties via the Chat!
- This session is being recorded and will be emailed to registrants within the next week.
- Remember not to disclose any Personal Health Information (PHI) during the session.
- This 1-credit-per hour Group Learning program has been certified by the College of Family Physicians of Canada for up to **6 Mainpro+** credits.
- This event is also an Accredited Group Learning Activity through the Royal College of Physicians and Surgeons of Canada. You may claim a maximum of **6.00 hours.**

Objectives of this Series

After participating in this program, participants will be able to:

- Describe what others have done to integrate palliative care services into their practice.
- Share knowledge and experience with their peers.
- Increase their knowledge and comfort around integrating a palliative care approach for their patients with advanced heart failure.

Overview of Topics

Session #	Session title	Date/ Time
Session 1	Collaboration Building: How to build collaboration with teams in your setting	October 2, 2024 from 12-1pm ET
Session 2	Diuretic management in an outpatient setting	December 11, 2024 from 12-1pm ET
Session 3	Challenging conversations	February 5, 2025 from 12-1pm ET
Session 4	De-prescribing cardiac and other medications: palliative care in people with advanced heart failure	April 30, 2025 from 12-1pm ET
Session 5	Non ischemic causes of heart failure	June 25, 2025 from 12-1pm ET
Session 6	Interaction of heart failure and lung disease	August 20, 2025 from 12-1pm ET

Objectives of this Session

After participating in this session, participants will be able to:

- Gain familiarity with the general principles of deprescribing in advanced heart failure.
- Learn how to make patient-specific decisions in the care of patients with advanced heart failure.
- Appreciate the need for value-based discussions around deprescribing.

Review of cardiac medications

Quadruple therapy: Guideline Directed Medical Therapy in HFrEF

https://tools.cep.health/tool/managing-patients-with-heart-failure-in-primary-care/#hfpharm

Quadruple therapy: Guideline Directed Medical Therapy in HF

ACE/ARB/ARNI	Beta Blockers	MRA	SGLT2
• ACE-Inhibitors: Enalapril, Perindopril, Ramipril, Trandolapril • ARB: Candesartan, Valsartan • ARNI: Sacubitril-Valsartan	• Bisoprolol • Carvedilol • Metoprolol (CR/XL)	• Spironolactone • Eplerenone	• Dapagliflozin • Empagliflozin • Canagliflozin

Additional Cardiovascular Pharmacotherapies

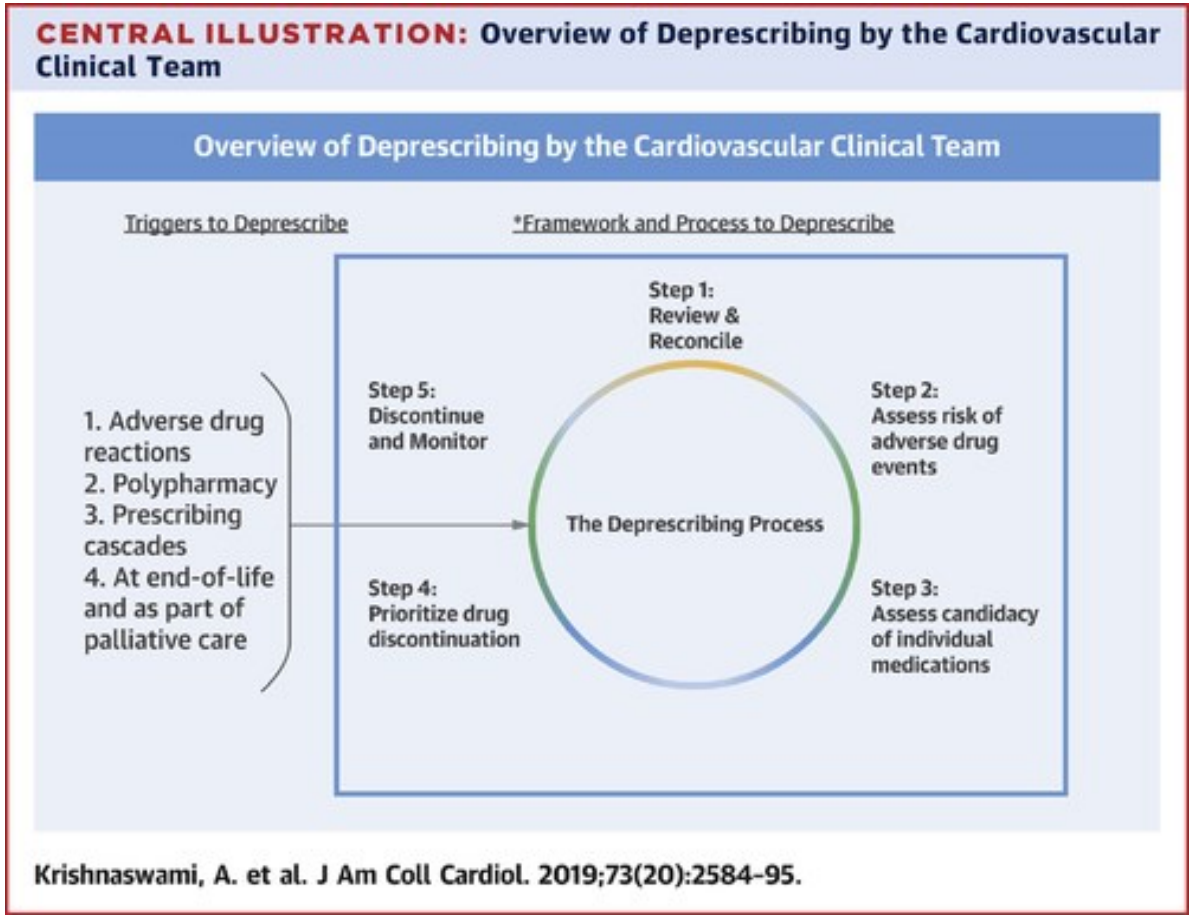
Diuretics	• Loop: furosemide, bumetanide • Thiazide: hydrochlorothiazide • Thiazide-like: metolazone
Statins	• Atorvastatin • Simvastatin • Pravastatin
Anticoagulants	• Rivaroxaban • Apixaban • Warfarin
Antiplatelet	•Clopidogrel (Plavix) •Ticagrelor (Brilinta) •Prasugrel (Effient) •Aspirin
Antiarrhythmics	• Amiodarone • Dofetolide • Calcium channel blockers • Sotalol
Adjunct	• Sinus node inhibitor: ivabradine • Vasodilator: hydralazine/isosorbide dinitrate • Cardiac glycoside: digoxin

Why deprescribe?

What is Deprescribing?

- A planned and supervised process of dose reduction or stopping medications that may no longer be beneficial or may be causing harm.

- Goal:
  - Align medication use with patient goals, prognosis, and life expectancy
  - Avoid unnecessary polypharmacy
  - Avoid increasing side effects



Krishnaswami A, Steinman MA, Goyal P, Zullo AR, Anderson TS, Birtcher KK, Goodlin SJ, Maurer MS, Alexander KP, Rich MW, Tjia J; Geriatric Cardiology Section Leadership Council, American College of Cardiology. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May 28;73(20):2584-2595. doi: 10.1016/j.jacc.2019.03.467. PMID: 31118153; PMCID: PMC6724706.

Prescribing Guidelines for Multi-Morbid Patient

- **STOPP** (Screening Tool of Older Person's Prescriptions)
- **START** (Screening Tool to Alert to Right Treatment)
- American Geriatrics Society **BEERS** Criteria (2023)

When should we consider deprescribing?

Triggers to Deprescribe

Adverse Drug Reactions

- Varied presentations
- Asymptomatic: e.g. abnormal laboratory value
- Symptomatic: e.g. dizziness, shortness of breath
- Examples:
  - Hyperkalemia with ACE/ARB/ARNI/MRA
  - Gastrointestinal bleeding with anticoagulants
  - Orthostatic hypotension with anti-hypertensives, diuretics

Table 1.
Potentially Inappropriate Cardiovascular Medication Use in Older Adults

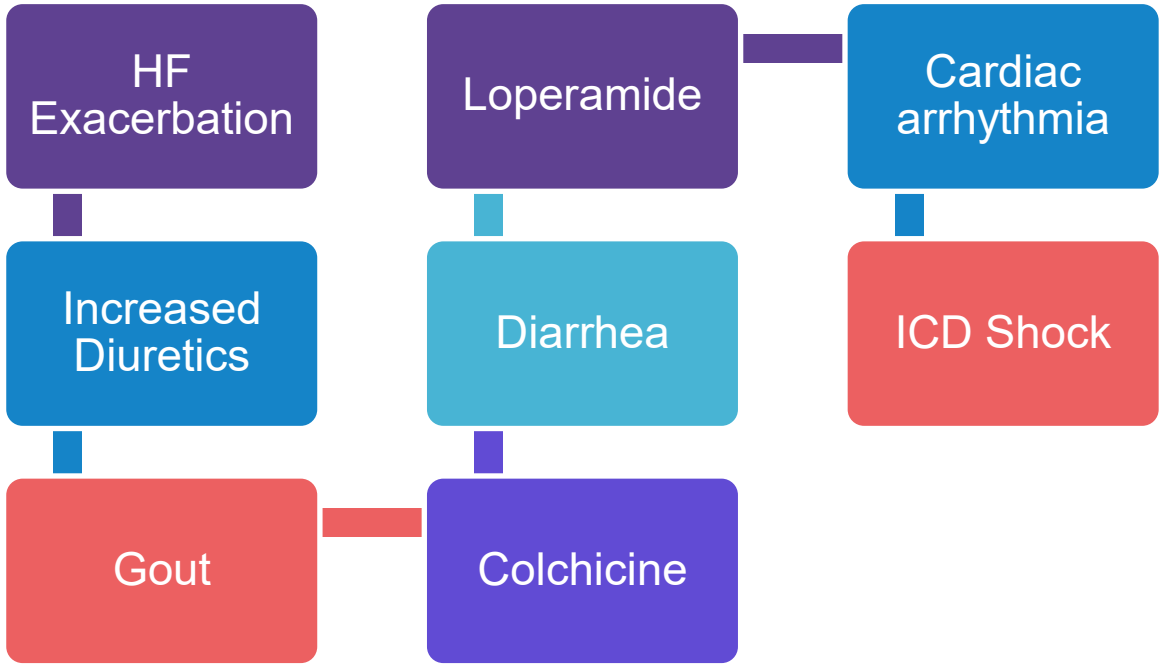
Cardiovascular Medication	Rationale
Central alpha agonists (e.g., clonidine)	Central nervous system effects, orthostatic hypotension, bradycardia
Dronedarone	Heart failure
Digoxin	More effective alternatives exist (avoid as 1st line)
Nifedipine, Immediate release	Hypotension, myocardial ischemia
Aspirin for primary prevention of cardiac events	Risk may exceed benefits for adults ≥70 yrs when used for primary prevention.
Dabigatran	Increased risk of gastrointestinal bleeding in older adults
Prasugrel	Increased risk of fatal and intracranial bleeding
Vasodilators	Syncope
Peripheral alpha-1 blockers (e.g., doxazosin, prazosin, terazosin)	Orthostatic hypotension

Krishnaswami A, Steinman MA, Goyal P, Zullo AR, Anderson TS, Birtcher KK, Goodlin SJ, Maurer MS, Alexander KP, Rich MW, Tjia J; Geriatric Cardiology Section Leadership Council, American College of Cardiology. Deprescribing in Older Adults With Cardiovascular Disease. J Am Coll Cardiol. 2019 May 28;73(20):2584-2595. doi: 10.1016/j.jacc.2019.03.467. PMID: 31118153; PMCID: PMC6724706.

Triggers to Deprescribe

Prescribing Cascades

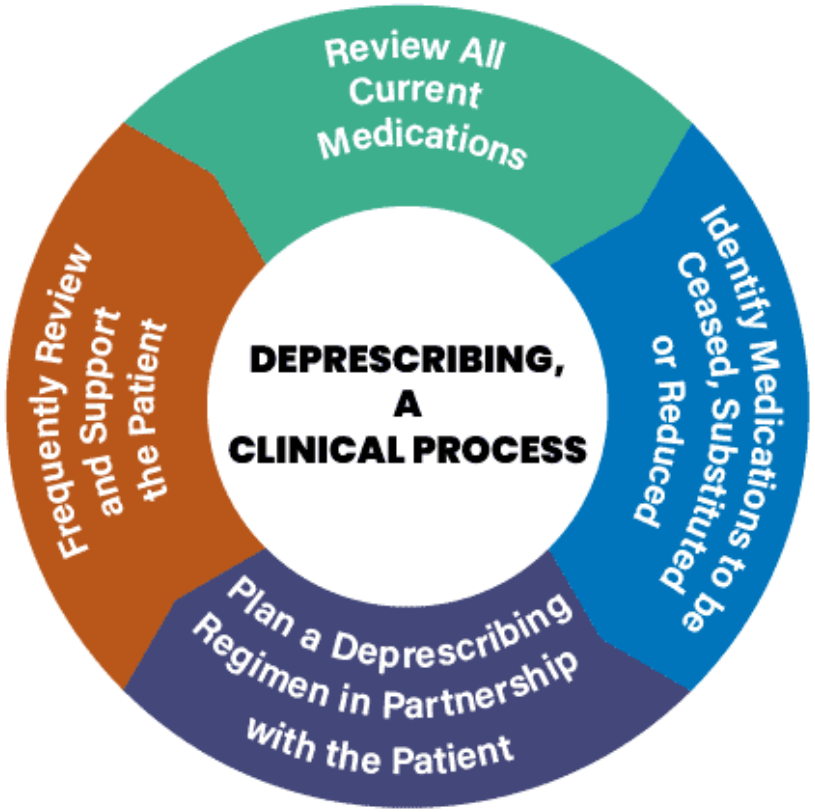
- Sequence of events that starts with the prescription of drug followed by an adverse drug reaction that is misinterpreted as a new medical condition
- Leads to additional medication prescription to treat drug-induced adverse event



Triggers to Deprescribe

Patient-related Factors

- Prognostic triggers: estimated life expectancy < 6-12 months
- Functional decline: increasing frailty, falls, or poor oral intake; loss of oral route
- Patient or caregiver preferences: desire to simplify medication regimen, reduce pill burden



Strategies for patient-specific deprescribing

Steps to Deprescribe

1. Medication reconciliation
2. Individual risk assessments and adverse effect of individual medications
3. Assess each drug's eligibility for discontinuation
4. Prioritize drug discontinuation based on:
    - Risk/benefit balance
    - Ease of discontinuation
    - Risk of adverse event with drug withdrawal
    - Patient preference

Statins

- Evidence that statins are safe to stop
- Generally, burden outweighs benefit
- Don’t assume people are keen to stop as they have a long history of being told they need to be on it “for life”

Statins – Kutner JS study

- Randomization 381 patients with life expectancy 1-month to 1-year
- Continue vs. discontinue statin therapy
  - No difference in 60-day mortality
  - No difference in cardiovascular events
  - QOL better in the discontinuation arm
  - Daily cost savings of $3.37 ($716 annually)

- Can extrapolate to other anti-lipid agents: niacin, fibrates

(Kutner JS, et al. JAMA Intern Med. 2015)

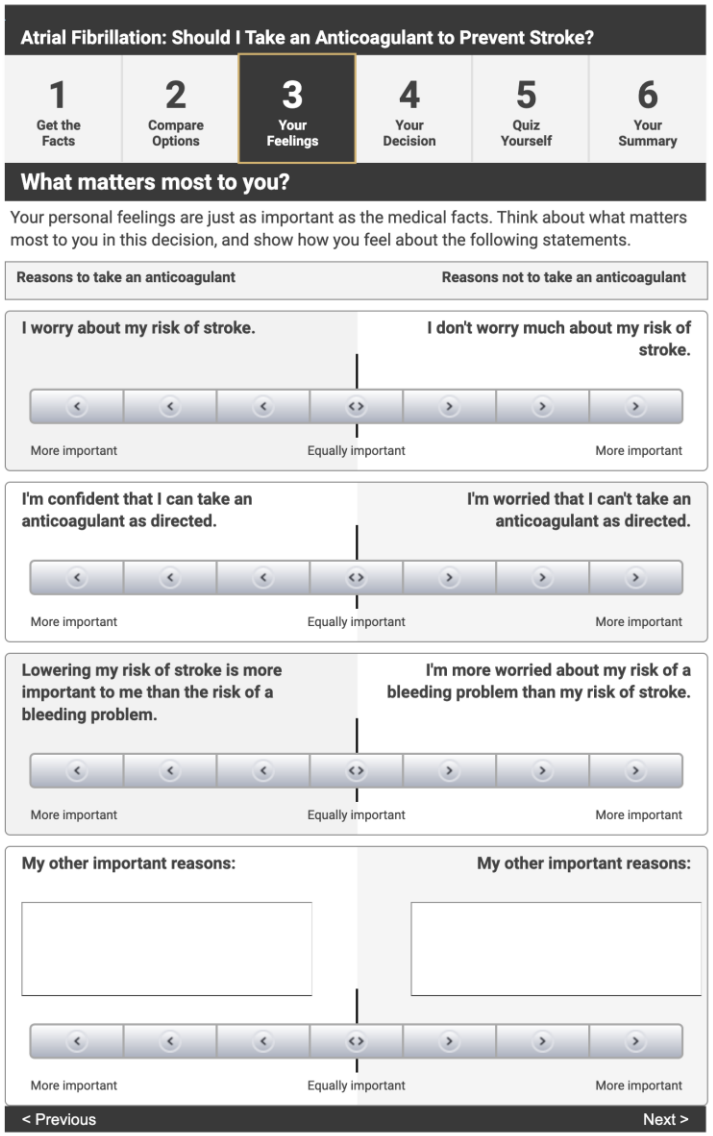
Anticoagulation

- No one right answer
- Requires individualized decision-making of risks/benefits
- Review burdens/risks of stopping
- Don’t forget that thrombotic events are not often fatal, but may add to symptom burden and poorer QOL

Decision Making Aids

https://www.healthwise.net/ohridecisionaid/Content/StdDocument.aspx?DOCHWID=tx2209

https://www.england.nhs.uk/wp-content/uploads/2022/07/Making-a-decision-about-further-treatment-for-atrial-fibrillation.pdf



Current as of: June 25, 2023
Author: Healthwise Staff

Diabetic medications

- Do not aim for tight glucose control
- Risks of hypoglycemia significant and worse than a higher A1C

Cardiac medications: Deprescribing trials

RCTs of Deprescribing-Related Interventions Focused on Cardiovascular Medication Classes

First Author (Ref. #)	Deprescribing Process	Primary Outcome	Secondary Outcomes	Conclusions
Kutner et al. (33)	Not provided	Proportion of deaths at 60 days	Number of non-statin medications, death, cardiovascular events, performance status, QOL, symptoms, and cost savings	Statin discontinuation was safe and did not increase mortality. Several secondary benefits: improvements in QOL, less non-statin medication use, decrease in medication costs
Moonen et al. (34)	Deprescribing algorithm	Change in the overall cognition compound score	Chachanges in scores on cognitive domains, Geriatric Depression Scale-15, Apathy Scale, Groningen Activity Restriction Scale (functional status), and Cantril Ladder (QOL).	Deprescribing anti-HTN medications Did not improve cognitive, psychological, or general daily functioning, and did not increase the risk for adverse events
Luymes et al. (35)	Nurse prompting of physician to discuss prescribing with patients, followed by use of a guideline if deprescribing attempted	Difference in the increase in predicted (10-yr) CVD risk between control and per-protocol population	Systolic and diastolic blood pressures, cholesterol	The The predicted CVD risk increased by 2.0% in the per protocol group compared with 1.9% in the usual care group, and this was within the noninferiority margin
Gulla et al. (36)	Systematic medication review whereby physician received support from peers (collegial mentoring)	Number of anti-HTN drugs	Systolic blood pressure, pulse	Decreased number of anti-HTN medications. No sustained difference in pulse or systolic pressure
Halliday et al. (37)	Random treatment assignment; supervised, step-wise reduction in medications over 16 weeks	Relapse of DCM within 6 months	Coccomposite safety outcomes (cardiovascular mortality, major adverse cardiovascular events, and unplanned cardiovascular hospital admission) and the occurrence of sustained atrial or ventricular arrhythmias; other individual outcomes	Approximately 40% of patients deemed recovered from DCM will relapse following treatment withdrawal. Current recommendation is to continue treatment indefinitely
Ongoing study				

	Recommendation	When to reduce dose or withdraw
Diuretics	Keep unless clear reason to stop	Hypovolemia, hyponatriemia, dehydration, hypotonia
Beta-blockers	Consider gradual dose reduction, risk of reflex tachyarrhythmias	Fatigue, hypotension, bradycardia
ACE inhibitor, ARB, Sacubitril/valsartan, MRA	Keep, consider dose reduction	Hypotension, renal failure, hyperkaliemia
SGLT2 inhibitors	Keep	Renal failure
Ivabradinine	Keep	Bradycardia
Inotropics	Keep if symptomatic benefit and if facilitates dying at home.	Withdraw in the last hours and in those without symptomatic benefit

Front. Cardiovasc. Med., 23 May 2022
Sec. Heart Failure and Transplantation
Volume 9 - 2022
| https://doi.org/10.3389/fcvm.2022.883669

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Drug Withdrawn	Adverse Drug Withdrawal Event
Alpha 1-blocker	Increase in blood pressure
Angiotensin-converting enzyme inhibitor	Increase in blood pressure
Antianginal	Chest pain
Beta-blockers	Chest pain, tachycardia
Digoxin	Tachycardia
Diuretic agents	Increased vascular congestion

From Bain et al. (47).

Communication strategies

It is a conversation

- Introduce the conversations: “we should make sure you are on the right medications…”
- Ask first: do they know why they are on the medication?
- Explain what the purpose is and the side effects or reasons to think about stopping
- Give time for questions and emotions!
- Explore what matters to them
- Make a recommendation based on what matters and whether medication helps meet their goal

Case-Based Discussion

Case: Mrs. W: 89 year old woman

Lives at home with her family (son is primary caregiver)
Over past month, getting weaker
Dizziness when she does get up
Unsteady on her feet

BP: 85/55 HR: 76
Oxygen sat: 95% on room air

Case: Mrs. W: 89 year old woman

HFrEF: LV = 30%
NYHA III
Glaucoma
Diabetes
HTN
CKD (Creatinine 300s)
OA
Gout

Her medications

- Hydralazine 75 mg TID
- ISDN 20 mg TID
- ASA 81 mg
- Bisoprolol 5 mg
- Rosuvastatin 5 mg
- Linagliptin 5 mg
- Amlodipine 5 mg BID
- Allopurinol 100 mg
- Lasix 80mg PO BID
- Amitriptyline 30mg QHS
- Spironolactone 25 mg qam

Issues

- Becoming weaker; in bed most of the day
- Dizzy when she sits up
- Not eating much

BP: 84/50
HR: 70
No congestion symptoms

CASE

- Where do you start?
- What are the challenges you currently face?
- What can we strive to do differently?

Questions/Discussion

Wrap Up

- Please fill out the feedback survey following the session! Link has been added into the chat.
- A recording of this session will be e-mailed to registrants within the next week.
- Please join us for the next session in this series on **Non ischemic causes of heart failure on June 25, 2025 from 12-1pm ET**

Thank You

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