Heart Disease Community of Practice Series 2

Update to medical management of HF decompensations in the community, including Cardiorenal dysfunction: how to manage with a palliative approach to care.

Project ECHO
Palliative Care - Canada
BY Pallium Canada

Host and Moderator: Diana Vincze, Pallium Canada

Presenter: Morgan Krauter, NP

Date: November 16, 2022

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 and Moderator

Diana Vincze, Palliative Care ECHO Project Manager, Pallium Canada

Presenter

Morgan Krauter, NP, CCN(C)
Nurse Practitioner, Heart Function

Panelists

Dr. Leah Steinberg, MD, CFPC, FCFP, MA
Palliative Care Clinician, Sinai Health System
Assistant Professor, Division of Palliative Care, University of Toronto

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

Introductions

Panelists (continued)

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
Co-chair Physician Diversity, Equity and Inclusion Committee, VCH

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

Shannon Poyntz, RN-PHC, MN
Nurse Practioner, Supportive Care
North York General Hospital

Drew Stumborg, RN
Saskatchewan Health Authority

Disclosure

Relationship with Financial Sponsors:

Pallium Canada

- Not-for-profit
- Funded by Health Canada

Disclosure

This program has received financial support from:

- Health Canada in the form of a contribution program
- Generates funds to support operations and R&D from Pallium Pocketbook sales and course registration fees

Host/ Presenter/Panelists:

- Diana Vincze: Palliative Care ECHO Project Manager, Pallium Canada
- Dr. Leah Steinberg: Pallium Canada (education material), HPCO (clinical advisory committee, educator)
- 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)
- Dr. Michael Slawnych: Novartis
- Drew Stumborg: None to disclose.
- Morgan Krauter: Servier, BI, Novartis (speaker fees)
- Shannon Poyntz: 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.
- You are also welcome to use chat function to ask questions, add comments or to let us know if you are having technical difficulties, but also feel free to raise your hand!
- 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

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	Update to medical management of HF decompensations in the community, including Cardiorenal dysfunction: how to manage with a palliative approach to care	November 16, 2022 from 12-1pm ET
Session 2	Demystifying ICDs – do you always need to deactivate?	January 18, 2023 from 12-1pm ET
Session 3	Complex case management/ Patients with complex goals of care	March 15, 2023 from 12-1pm ET
Session 4	Diuretic management in the community: Lasix, Metolazone and Bumetanide	May 17, 2023 from 12-1pm ET
Session 5	Multi-morbidity and Heart Failure- Managing Patients with Multiple Illnesses	September 20, 2023 from 12-1pm ET
Session 6	De-prescribing cardiac and other medications: palliative care in people with advanced heart failure	November 15, 2023 from 12-1pm ET

Objectives of this Session

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

- Learn some tips in the use of quadruple therapy in patients with advanced heart failure
- Learn how to integrate a palliative care approach to cardio-renal dysfunction

Guideline Directed Medical Care (GDMT) for Heart Failure

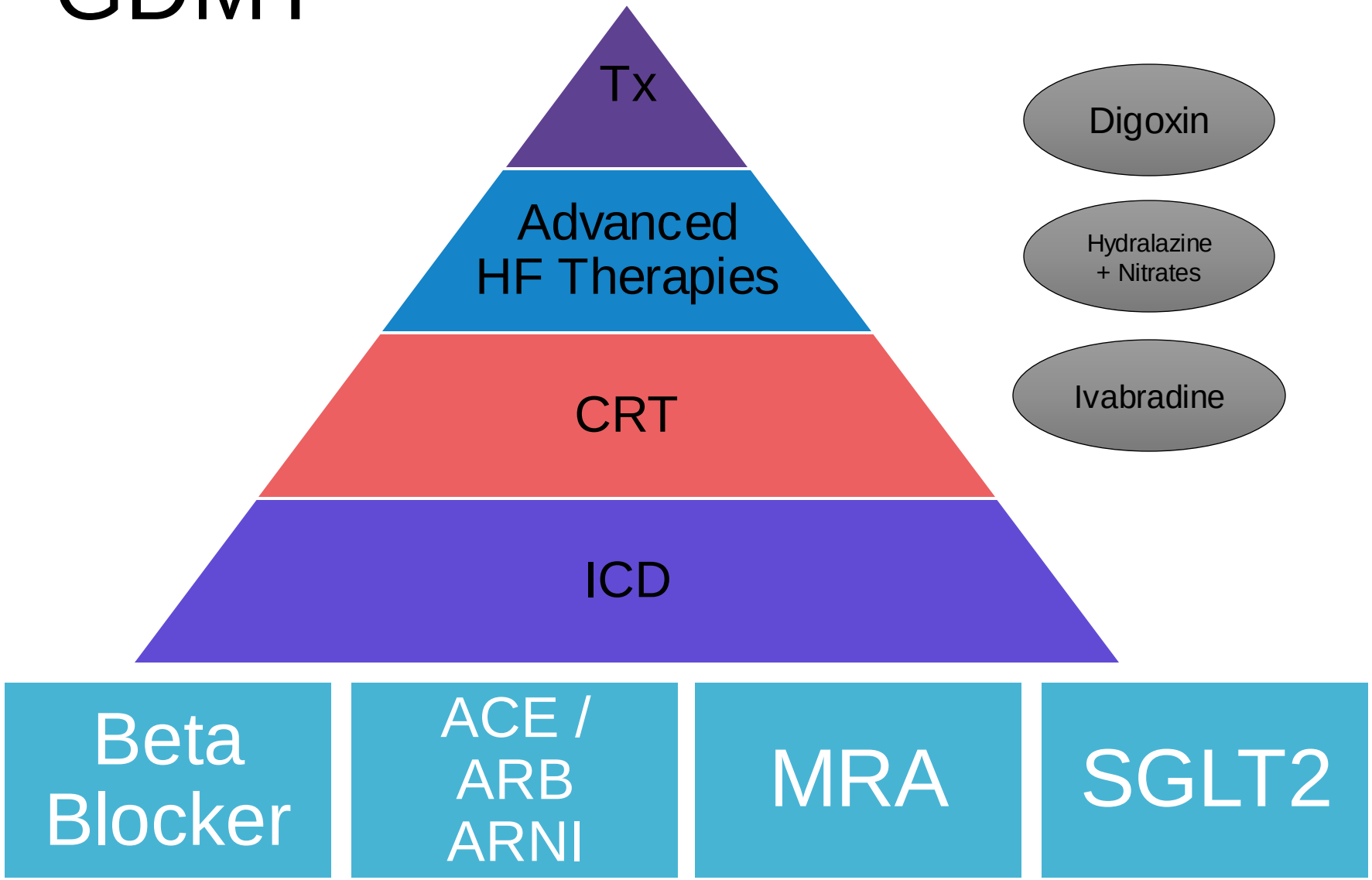
Good Palliative Care is Good Heart Failure Care

- Guideline-directed medical therapies (GDMT) for heart failure have known benefits for reducing morbidity and mortality, preventing hospitalization, and improving functional status and symptom management.

- Familiarity with GDMT is important to derive symptom control benefit in parallel to optimizing heart function for as long as possible.

- Underpinning of most GDMT medications (ARNI, MRA, SGLT2) include a diuretic effect which can mitigate need for loop diuretics and need for aggressive diuretic regimens.

HFrEF GDMT


Tx
Advanced HF Therapies
CRT
ICD
Digoxin
Hydralazine + Nitrates
Ivabradine
Beta Blocker
ACE / ARB ARNI
MRA
SGLT2

Drug	Initial Dose	Target Dose	Dosage Forms (mg)
Angiotensin Converting Enzyme Inhibitor (ACEI) Goal: Target or maximally tolerated dose			
Captopril	12.5mg TID	50mg TID	12.5, 25, 50, 100
Enalapril	2.5mg BID	10mg BID	2.5, 5, 10, 20
Lisinopril	2.5mg daily	30-40mg daily	5, 10, 20, 40
Perindopril	2mg daily	4-8mg daily	2, 4, 8
Ramipril	1.25-2.5mg BID	5mg BID	1.25, 2.5, 5, 10, 15
Trandolapril	0.5-1mg daily	4mg daily	0.5, 1, 2, 4
Angiotensin receptor blocker (ARB) Goal: Target or maximally tolerated dose			
Candesartan	4mg daily	32mg daily	4, 8, 16, 32
Valsartan	40mg BID	160mg BID	40, 80, 160, 320
Beta-Blockers Goal: Target or maximally tolerated dose			
Bisoprolol	1.25mg daily	10mg daily	5, 10
Carvedilol	3.125mg BID	25mg BID (>85kg 50mg BID)	3.125, 6.25, 12.5, 25
Metoprolol Tartrate	6.25-12.5mg BID	100mg BID	25, 50, 100 SR: 100, 200
Mineralocorticoid Receptor Antagonists (MRA) Goal: Target or maximally tolerated dose			
Spironolactone	12.5-25mg daily	50mg daily	25, 50, 100
Eplerenone (Inspra®)	12.5-25mg daily	50mg daily	25, 50
Angiotensin receptor-neprilysin inhibitor (ARNI) Goal: Target or maximally tolerated dose			
Sacubitril/ Valsartan (Entresto®)	50-100mg BID	200mg BID	Sacubitril/Valsartan 24.3/25.7 (50); 48.6/51.4 (100); 97.2/102.8 (200) Note: 103mg Entresto® valsartan = 160mg Diovan® valsartan

MED-HF

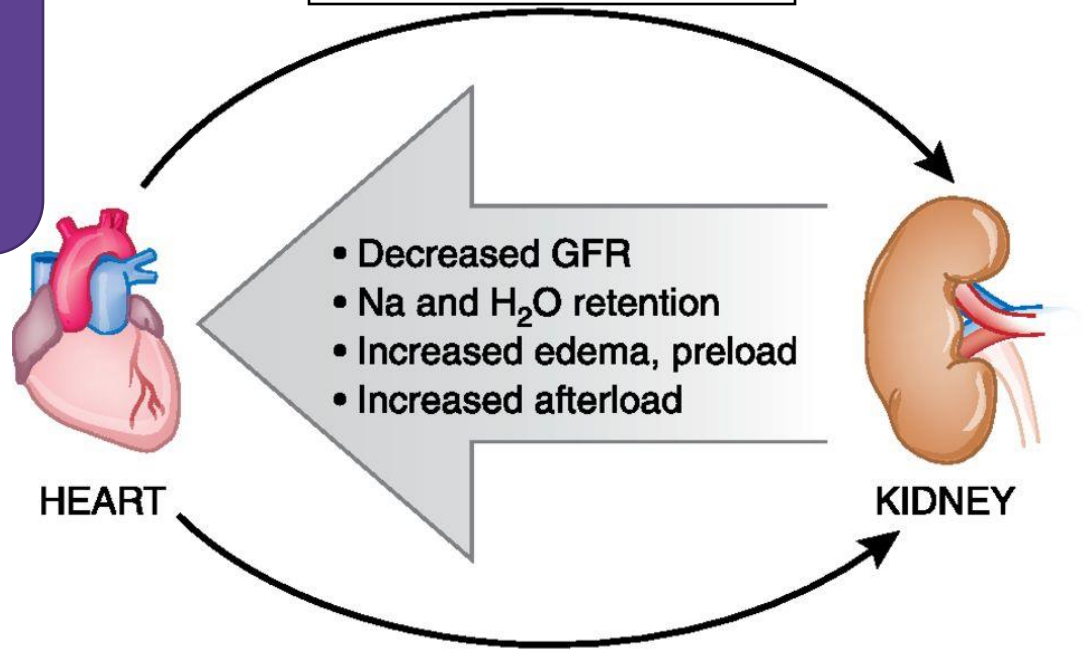
Cardiorenal Dysfunction

Pump Failure

Reduced Cardiac Output

- Decreased circulating volume
- Activation of RAAS, SNS and inflammatory pathways

- GDT optimization
- Inotrope therapy
- MCS



- Fluid restriction
- Diuretic therapy

Fluid Management

- Venous congestion and venous hypertension
- Decreased renal perfusion
- Kidney interstitial edema
- Activation of RAAS, SNS and inflammatory pathways

Venous Congestion

Strategies to Optimize

- Efficient decongestion with combination diuretic therapy: dose, route, type

- Modified volume assessments through palliative care lens
  - Patient-specific congestive symptoms
  - Daily weights, if possible
  - Physical exam findings of congestion: abdominal bloating, peripheral edema, respiratory
  - Laboratory investigations when goal concordant

- Optimization of GDMT, including ACE/ARB/ARNI and MRA if possible
- Consideration of ultrafiltration or peritoneal dialysis for volume control in refractory HF
- Collaborative nephrology care

Case-Based Discussion

Mr. Jack Black

- JB is a 78 year old man with a history of ischemic cardiomyopathy, HFrEF and cardiorenal dysfunction secondary to longstanding diabetes mellitus and hypertension.

- He is referred to the Heart Function Clinic by his community cardiologist for assistance with diuresis and palliative care measures.

- 6-months ago, he was swimming regularly with his wife, used a walker to ambulate, and pleased with his quality of life. He was admitted 2-months ago for CHF exacerbation and since then has reported NYHA III-IV symptoms. He is mainly housebound.

- He presents to your office with evidence of volume overload and 25lbs weight gain from baseline.

Mr. Jack Black

- Current cardiac medications: Bisoprolol 2.5mg daily, Furosemide 80mg IV daily, Metolazone 5mg PO q-2 days, Hydralazine 50mg PO QID, Isosorbide dinitrate 20mg QID, Potassium chloride 40mmol TID, Rivaroxaban 15mg daily, Rosuvastatin 5mg daily

- Labs: Na 136 mmol/L, K 4.3 mmol/L, Cr 187 umol/L, Hgb 101 g/L

- Treatment preferences: good insight into disease trajectory; active medical management to optimize functional status, including invasive tests and procedures; would like to be able to get back in the pool

Discussion questions

- What are 3 opportunities for heart failure optimization in JB?
- What strategies can you use to counter cardiorenal dysfunction in this patient?
- How do you navigate implementation and titration of home intravenous furosemide in your patient population?

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:
  - **Demystifying ICDs – do you always need to deactivate?**
  - **January 18, 2023 from 12-1pm ET**
- If you would like to present a case at one of our upcoming sessions, contact echo@pallium.ca

Thank You

Project ECHO
Palliative Care - Canada
BY
Pallium Canada

Stay Connected
www.echopalliative.com