

Heart Failure Palliative Approach to Care (HeFPAC)

VERSION 3

A GUIDE FOR NURSES

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- To inform HF-specific assessments & care
- To communicate with patients, their families and the health team about HF specific issues
- To integrate HF issues into collaborative care plans & goals of care discussions
- In conjunction with other assessment tools and clinical guidelines

A palliative approach refers to integrated and optimal symptom management and supportive care to reduce suffering and improve quality of life; **it does not depend on a referral to a palliative care service or program.**

What is Heart Failure?

- Heart Failure is a complex syndrome in which abnormal heart function results in or increases the subsequent risk of reduced cardiac output and/or pulmonary and systemic congestion
- HF is a progressive, life limiting chronic illness that reduces quality of life and exercise tolerance and is associated with high morbidity and mortality
- HF can be classified according to the patient's response to physical activity using the New York Heart Association (NYHA) Classification system. Patients with advanced HF are NYHA 3 or 4
- HF symptoms can fluctuate on a daily basis; as HF progresses, previous symptom management strategies may become ineffective; this will require a reassessment of the patient and approach to care
- Optimal symptom control and comfort is possible even when HF is advanced or end-stage

NYHA Functional Classification of HF

CLASS	DESCRIPTION
1	<ul style="list-style-type: none"> • No limitation of physical activity • Ordinary physical activity does not cause fatigue, palpitation or shortness of breath (SOB)
2	<ul style="list-style-type: none"> • Slight limitation of physical activity • Comfortable at rest, but ordinary physical activity results in fatigue, palpitations, SOB &/or angina
3	<ul style="list-style-type: none"> • Significant limitation of physical activity • Comfortable at rest but less than ordinary activity causes fatigue, palpitations, SOB &/or angina
4	<ul style="list-style-type: none"> • Unable to carry on any physical activity without discomfort • Symptoms of heart failure at rest

Key Assessments

SYMPTOM/SIGN	SIGNIFICANCE	ASSESSMENT/MONITORING
Fatigue	<ul style="list-style-type: none"> • Significantly reduces quality of life; Causes include decreasing cardiac output, changes in skeletal muscle metabolism & structure, co-morbidities 	<ul style="list-style-type: none"> • Assess for potentially reversible factors • Monitor ability to engage in activity
Edema/fluid retention	<ul style="list-style-type: none"> • Fluid retention causes weight (wt) gain * 1 kg (2.2 lbs) wt = 1 litre fluid • Wt gain of 3 lbs. overnight or 5 lbs. in a week is fluid • When muscle mass is lost & fluid is retained, there may be NO obvious wt gain or loss. Therefore, wt can be an unreliable indicator of fluid retention as HF progresses • High sodium (Na) intake may worsen symptoms even in end-stage illness 	<ul style="list-style-type: none"> • Assess: wt regularly (same time daily or weekly) • Edema in the extremities/ sacrum • Ascites: assess for increased abdominal girth (i.e. tight pants) • Limit Na intake. Note inadvertent intake of high Na foods (i.e. canned soups, any prepared food)
Dyspnea/breathlessness/orthopnea	<ul style="list-style-type: none"> • Dyspnea can vary in intensity & is often associated with anxiety • Lungs may be clear (no crackles) even when fluid is retained and there is volume overload • Orthopnea may be subtle sign preceding Paroxysmal nocturnal dyspnea (PND); PND is the sudden, panicky wakening after hours of sleep; it is caused by increasing venous return due to prolonged recumbent position 	<ul style="list-style-type: none"> • Respiratory assessment: Auscultate lungs • Ask: Are you (more) SOB than normal? • Ask about: need for increasing pillows to aid sleeping; orthopnea (SOB lying flat, relief sitting up); sudden waking & feelings of panic at night
Pain: Cardiac & non-cardiac	<ul style="list-style-type: none"> • Cardiac related pain: Angina - Chest pain is common with volume retention • Non-cardiac pain: may arise from multiple interacting factors (i.e. musculoskeletal problems, diabetic neuropathy, edema in periphery & GI system, liver congestion, abdominal bloating) • May indicate liver congestion or ↓ renal function • Gut edema can be associated with nausea and/or change in appetite • Can be exacerbated by breathlessness 	<ul style="list-style-type: none"> • Assess for presence and nature of chest & abdominal pain • Ask: Does pain occur with activity or at rest? • Ask: Is pain relieved by medication (i.e. nitrates, analgesics, diuretics)? • Assess for reversible causes of nausea (i.e. fluid retention, digitalis toxicity)
Nausea/loss of appetite/anorexia		
Hypotension &/or tachycardia	<ul style="list-style-type: none"> • Systolic BP < 90mmHg is not uncommon and may be normal for some patients • Over-diuresis may cause dehydration • HR > 100 may indicate dehydration OR worsening fluid retention 	<ul style="list-style-type: none"> • Know patient's normal ranges for HR & BP • Assess for postural BP change & symptoms of hypotension – ↓ alertness or change in mental status – postural dizziness • Assess HR & signs of fluid retention or dehydration
Changes in cognitive function	<ul style="list-style-type: none"> • Cognitive decline associated with ↓ perfusion/oxygenation to the CNS; this may impair decision-making (i.e. for medication adherence, dietary intake & decisions about goals of care) 	<ul style="list-style-type: none"> • Assess for: <ul style="list-style-type: none"> - change in cognitive function, mood & affect - ability to accomplish ADLs

Is there a reversible condition that may be making HF symptoms worse?

CONDITION	EFFECTS
Anemia	<ul style="list-style-type: none"> • Low haemoglobin (hgb) worsens HF symptoms & makes fluid retention difficult to treat. Consult re: possible transfusion if hgb < 90 mg/dl. Increased blood volume resulting from the transfusion is managed with IV furosemide
Digoxin toxicity	<ul style="list-style-type: none"> • Causes nausea, cachexia, general malaise, poor appetite • Consult re: serum digoxin level
Fluid volume overload	<ul style="list-style-type: none"> • As the heart pumps less effectively over time, fluid accumulates in interstitial spaces, leading to acute pulmonary edema (acute HF). Consult to consider diuresis
Infection	<ul style="list-style-type: none"> • Any infection (i.e. UTI, pneumonia) worsens HF symptoms • Assess for presence of infection
New arrhythmia	<ul style="list-style-type: none"> • New onset atrial fibrillation or other rhythm issues can worsen HF • Consult re: ECG
New medication	<ul style="list-style-type: none"> • Medication for another illness (i.e. NSAIDs or steroids) will worsen HF • Medication reconciliation

HF Medications and Adjuvants

As a comfort measure, discuss discontinuation of cardiovascular medications that are 'disease-modifying' and that have NO effect on symptoms (i.e. ECASA, Plavix, Statins, amlodipine).

MEDICATION	TIPS TO REMEMBER
Angiotensin-Converting Enzyme (ACE) Inhibitors (i.e. ramipril); and Beta-Blockers (i.e. bisoprolol)	<ul style="list-style-type: none"> • Decreases symptoms and risk of worsening HF • Consider dose reduction or withdrawal if symptomatic hypotension (+++ fatigue, dizziness) • Withdrawal for asymptomatic hypotension is not recommended
Nitrates (i.e. nitroglycerin)	<ul style="list-style-type: none"> • May relieve breathlessness and/or chest pain
Diuretics: Loop (i.e. furosemide)	<ul style="list-style-type: none"> • Learn patient's 'target' or 'dry' weight (wt. at which no fluid retained) • Consult to increase furosemide dose for > 3 lbs over target weight or to decrease dose if dehydrated • Call MD or NP if wt gain does not respond to increased diuretic
Analgesics	<ul style="list-style-type: none"> • Opioids may be indicated and safely used in patients with HF • Avoid NSAIDs; they can worsen fluid retention and HF symptoms

Cardiac Device Therapies

ICD: Implantable Cardiac Defibrillator	<ul style="list-style-type: none"> • An implanted medical device that can detect life-threatening ventricular arrhythmias & prevent sudden cardiac death • ICD is programmed to deliver special pacing or a shock to terminate life-threatening rhythms • ICD deactivation will not cause immediate death. Deactivation means the ICD will not deliver a shock in the event there is a life-threatening arrhythmia. Consult with ICD deactivation protocol or electrophysiologist for further information
CRT: Cardiac Resynchronization Therapy (biventricular pacing)	<ul style="list-style-type: none"> • Special type of pacing device, which synchronizes ventricular action to help ↓ HF symptoms • Can be used alone or combined with ICD
Pacemaker	<ul style="list-style-type: none"> • Pacemakers are implanted to treat bradycardias when the normal cardiac conduction system is ineffective or damaged. Pacemakers will not interfere with a natural death
VAD: Ventricular Assistive Device LVAD (Left Ventricular Assistive Device)	<ul style="list-style-type: none"> • A VAD is a mechanical pump connected to a power source that is used when ventricular function is severely compromised and unable to support circulation

Issues for Discussion with Patient and Family

- 1. HF trajectory:** Are the patient and family aware of the HF diagnosis & pattern of the HF illness trajectory?
 - Refer to HF as a *chronic, progressive life-limiting illness*
 - Discuss implications of the uncertain HF trajectory: "hope for the best, plan for the worst"
 - Consider using patient education aids from web resources listed in this guide
 - Engage in new and re-visit previous discussions re: Advance Care Planning. For resources visit www.advancecareplanning.ca
- 2. Have goals of care discussions occurred to:**
 - Optimize symptom relief & management, and quality of life
 - Plan for emergency situations that may occur to avoid hospitalization (if desired) & possible (i.e. managing severe dyspnea)
 - Coordinate care with the patient's specialist health care professionals, teams or clinics (i.e. HF, dialysis)
 - Establish, document and review resuscitation status
 - Discuss possible deactivation of the shock portion of the ICD
- 3. Are home care services optimized? Consider:**
 - Caregiver needs for information, support & /or respite
 - Referral to Long Term Care, Residential Care, Hospice
 - * Use Palliative Performance Scale score (PPS) and/or Edmonton Symptom Assessment Scale (ESAS) to assist in decisions for support & referral

Web-Based Resources: HF facts, medication & symptom guidelines, HF Guidelines and patient education information and videos can be downloaded at:
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