PERIOPERATIVE SERVICES

Congestive Heart Failure (CHF)

Patient Information Booklet

Heart Failure Patient Information Booklet (for inpatient use)

You have had a recent visit to our hospital with symptoms of congestion or extra fluid in your body. You have been told that this is heart failure and although it is a fearful name, it does not mean your heart is going to stop. Heart failure is a chronic disease that affects many people worldwide. Learning about this problem and working with your health care team will help you to manage your symptoms and improve your heart function. This information booklet is meant to provide information about heart failure. For more details please visit our website at www.qch.on.ca for the Heart Function Clinic or call the Heart Function Clinic Nurse at 613-721-2000 ext. 2961.

What is Heart Failure?

**Heart Failure** (or congestive heart failure - **CHF**) can happen to a person with a heart muscle problem. Sometimes the heart cannot pump enough blood to meet the body’s needs. This makes the blood congest or “back-up” around the heart. It can cause people to feel very tired and lightheaded. Often they develop swelling in their ankles, legs or stomach. Sometimes they can’t sleep or do their usual activities comfortably because they feel short of breath.

## There are two types of heart muscle problems causing CHF

* The heart muscle is stiff and has trouble relaxing to fill with blood (diastolic heart failure or heart failure with preserved ejection fraction HFpEF)
* The heart muscle is weak and the heart is big and baggy (systolic heart failure or heart failure with reduced ejection fraction HFrEF)

You and your doctors may know from past tests if you have a stiff or weak heart. If not, an ultrasound test of your chest called an echocardiogram may be done. This test checks the heart to see if there is any problem with how it is pumping.

## What causes problems with the heart muscle?

There are many conditions that can strain and damage your heart muscle. Some are sudden and others happen over time. Heart damage can be caused by heart attacks, high blood pressure, valve problems, alcohol abuse, infections, congenital (birth) defects, or unknown reasons.

## Signs & Symptoms

People with heart failure are at risk for hospitalizations because of fluid buildup. If blood is not pumped around your body well, it can back up causing fluid to collect in your lungs, stomach or legs. You may feel more easily breathless, more swollen or bloated, more tired or weaker than normal. The doctor will help you get rid of this extra fluid by giving you water pills called diuretics, usually furosemide (LasixTM).These pills make you pass more urine to get rid of the extra fluid so your heart can feel better and your symptoms go away.

Not everyone has the same symptoms. Know your own signs/symptoms. Think back to how you felt just before coming to the hospital.

Did you have?

* Rapid weight gain
* Shortness of breath
* Fatigue, tiredness
* Stomach bloating, swelling of legs, feet, hands
* Cough with white frothy sputum
* Nausea, loss of appetite
* Confusion or foggy brain, dizziness or light-headedness
* Difficulty with lying down (need to be upright in bed or in a chair to sleep)

Research shows that a combination of “self-care behaviours” and medications help people with heart failure feel better, stay out of hospital, and live longer.

What are “Self-Care Behaviors”?

Self-care behaviors are the actions you can take day-to-day to look after your heart and watch for problems.

These actions are:

* **Weigh yourself** every day, in the morning, after going to the bathroom.
* **Limit your salt** intake.
* **Be active** (eg. walk) every day.
* **Quit** smoking/drinking too much alcohol.
* **Recognize signs of trouble**. Know the signs and symptoms of heart failure and when to call your doctor or go to the Emergency Room.

Let’s take a look at each of these behaviors in more detail.

## Daily weight

From now on, you will need to watch for signs of having too much fluid in your body. The best way to do this is to weigh yourself first thing every morning after going to the bathroom. This is called a dry weight.

* Write your dry weight down every day and look at what is happening along with your breathing, legs and stomach. Use a calendar or a chart like the one on page 8. Weight will go up and down by a pound or two. This is normal. Be on the lookout for trends. Is it going up or down?
* If your weight goes up or down quickly (**a gain or loss of 3 pounds overnight or 5 pounds in 5 to 7 days**) you may need the dose of your water pill (diuretic) adjusted.

**Sudden weight gain:**

* If the doctor has prescribed water pills for you to take because of sudden weight gain, take them as instructed until the extra weight and your symptoms go away. Contact your doctor or nurse to let them know.
* If you were not instructed by your doctor to take extra water pills, call your family doctor right away for help.

**Sudden weight loss:**

* If your weight has suddenly gone down and you do not feel well, call your doctor or nurse right away.

## Salt

One of the biggest reasons why fluid starts to build up is because of too much salt in food. Pre-packaged or restaurant foods are loaded with salt (sodium). Always read the nutrition label on everything you buy. In fact, go through your cupboards and fridge at home and take a look at how much sodium is in your food. You will be surprised at the amount of salt in some of them! Look for food with 200mg or less sodium per serving or 5% or less of total daily value on the label. Aim for no more than 1500mg a day of added sodium (don’t count natural sodium amounts in fresh foods). When you are shopping for groceries next time you can compare brand-to-brand and pick the brand with the lowest amount.

## Activity

If exercise came in a pill, everyone would be on it! It benefits your heart, body, and mind. Keeping active is a very important part of your treatment for heart failure. Aim for 30 minutes total of activity (like walking) every day. Start slow, and build up to this. Stop if you have chest pain, shortness of breath, nausea or dizziness. If you would like to join a structured program, call the University of Ottawa Heart Institute’s Cardiac Rehabilitation Center for more information. Their number is **613-696-7068**.

## Smoking and too much alcohol

If you smoke, QUIT! Smoking reduces the oxygen in your blood, and makes your heart beat too fast. It also causes inflammation in your blood vessels making them harden and become smaller. Your heart muscle needs to get a good blood supply to work well. Smoking can starve the heart of the oxygen and nutrients it needs to work properly. If you are a smoker, ask your health care provider for information and tools to help you quit. Call the University of Ottawa Heart Institute’s Quit Smoking Program for help at **613-696-7069**.

Drinking large amounts of alcohol is toxic to the heart and can cause or worsen heart failure. Talk to your doctor about your intake. Generally, the accepted amount is 1-2 drinks a day, to a maximum of 14 drinks a week for a man, and 9 drinks a week for a woman.

For more information and help with this or other addictions, please contact OAARS at

**613-241-5202.**

## Recognizing signs of trouble

Contact your health care provider if you have a sudden or unexpected

* weight gain or loss of three pounds in 1 day or five pounds in 5 to 7 days
* worsening swelling in the feet, legs or abdomen
* worsened breathing
* inability to do your usual activities
* cough with whitish frothy sputum
* dizziness or light-headedness

Also contact your provider if you have a concern with your medication.

**CALL 911 for:**

* unrelieved or frequent chest pain, chest pressures or tightness
* extreme shortness of breath at rest
* passing out or feeling like you’re going to pass out

Medications for Heart Failure

Medications, along with the “self-care behaviors” listed above, are an important part of your treatment. If your heart is weak, they are used to help rest the heart and try to reverse some of the damage to the muscle. There are certain types of medications that are commonly used. These are:

* **Beta-blockers** to slow down the heart rate.
* **ACE inhibitors or angiotensin receptor blockers** (ARBs) **or angiotensin receptor-neprilysin inhibitor** (ARNIs) to lower blood pressure.
* **Mineralocorticoid receptor antagonists** (MRAs) to stop the heart from becoming weaker.
* **Diuretics** or “water pills” that remove excess fluid from the body.

Not all of the medications listed above are used for every person. The medications and dosage chosen vary for each person. It is common to have medication and dosage changes during treatment to obtain the best results for each person. Many of the heart failure medications lower your blood pressure to protect your heart. Make sure to change positions slowly and wait for a few seconds before walking after you stand up. See the chart on page 10 and 11 for more information about medications.

## Potassium

Medications for heart failure can increase or decrease your potassium level. A low potassium level can cause extreme tiredness and weakness. A high potassium can cause your heart to beat irregularly. Your doctor will monitor your potassium level and you may be instructed to eat or avoid food that contains potassium and/or take a potassium supplement.

**Potassium-rich foods include:**

* Fresh fruits (oranges, bananas, and melons)
* Fruit juices (most juices, orange, pineapple and grapefruit).
* Avoid tomato juice because it contains too much salt
* Dried fruits (apricots, dates, prunes and raisins)
* Vegetables (potatoes, spinach, and sweet potatoes)
* Beans
* Meat, fish, poultry

## Medications to avoid

**Do not use** non-steroidal anti-inflammatory (NSAID’s) medications like:

* Ibuprophen (AdvilTM)
* AleveTM
* MotrinTM
* VoltarenTM cream

These can make your heart failure worse. Products using **acetaminophen (TylenolTM)** should be used instead. Please talk to your pharmacist or doctor if you have regular pain.

You should advise your physician if you are currently pregnant or plan to become pregnant since these medicines may be harmful to an unborn child.

Tips on taking your medications

* Learn about the medications you are taking (name, amount, what they look like and what they do).
* Bring all your medication bottles and boxes to your doctor appointments.
* Follow the directions for your prescription carefully. Medications will only work if you use them correctly.
* Take your medication regularly, even if you feel well or your heart is “better”.
* Take your medications at the same time or times every day. Discuss dose times with your physician. Sometimes spacing the dose of heart medications throughout the day can help reduce side-effects.
* Try not to miss taking your medication. If you miss a dose, take the missed dose as soon as you remember. If it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule. Do not take a double dose. Talk to your pharmacist for help organizing doses and delivering your medications if you have concerns.
* Ask your doctor or pharmacist before taking any medications or herbal products that you can buy without a prescription. Let your heart failure doctor know if a new drug is added by another doctor.
* Medications have many different actions and side effects. Call your doctor, nurse or pharmacist if you have questions, or if you notice side effects.
* Make sure that you have enough medication to last until your next prescription refill or visit to your doctor. When you are ordering refills, call your pharmacy a few days before you run out.

WEIGHT RECORD SHEET FOR\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (months)

Target (baseline) weight \_\_\_\_\_ (Your weight with no heart failure symptoms)

* Weigh yourself first thing each morning after going to the bathroom and write the weight down. Is it close to your target weight? You may need to take an extra water pill if your weight starts to go up quickly and/or you are getting signs of fluid buildup (difficulty breathing, cough, swelling of feet, legs ankles or stomach). Call the Heart Function Clinic at 613-721-2000 ext. 2961 for help.
* If you are having severe breathing problems (no relief even with resting), please go directly to the nearest emergency department.
* Avoid high salt foods like restaurant food and processed food.
* Be active every day. Move often and for as long as you can.

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Common Heart Failure Medications

## Diuretic

* Examples

furosemide (Lasix)

metolazone (Zaroxolyn)

hydrochlorothiazide

* Purpose: To get rid of excess fluid, sometimes called a “water pill”
* Common side effects

dizziness

dehydration

thirst and dry mouth

low potassium levels

gout

rare: skin rash

* Other important information

Take diuretics early in the day to avoid getting up at night to pass urine.

Have your potassium level and uric acid level checked regularly.

Weigh yourself every day.

Talk to your doctor before taking NSAIDs (Advil, Motrin, Indocid).

If you take both furosemide and metolazone, take your metolazone 30 minutes before taking your furosemide.

## Beta-blocker

* Examples

carvedilol

bisoprolol

metoprolol

* Purpose: to slow down heart rate
* Commons side effects

Low blood pressure

tiredness

shortness of breath

dizziness

* Other important information

Side effects are common when you start taking this medication.

Tell your doctor if you feel lightheaded all the time.

Tell your doctor if your side effects don’t improve in about one month.

## ACE inhibitor

* Examples

perindopril (Coversyl)

enalapril (Vasotec)

ramipril (Altace)

lisinopril (Prinivil, Zestril)

* Purpose: to lower blood pressure
* Common side effects

low blood pressure

dizziness when you stand up suddenly

high potassium levels

slowed kidney function

persistent dry cough

rare allergic reactions

* Other important information

Tell your doctor if you feel lightheaded all the time.

Have your potassium level and kidney function checked regularly.

## Angiotensin receptor blocker (ARB)

* Examples

valsartan (Diovan)

losartan (Cozaar)

candesartan (Atacand)

* Purpose: to lower blood pressure
* Common side effects

low blood pressure

dizziness when you stand up suddenly

high potassium levels

slowed kidney function

* Other important information

Tell your doctor if you feel lightheaded all the time.

Have your potassium level and kidney function checked regularly.

## Angiotensin receptor-neprilysin inhibitor (ARNI)

* Examples

sacubatril-valsartan (Estresto)

* Purpose: to lower blood pressure
* Common side effects

low blood pressure

dizziness when you stand up suddenly

high potassium levels

slowed kidney function

* Other important information

Tell your doctor if you feel lightheaded all the time.

Have your potassium level and kidney function checked regularly.

If you are switching from an ACEi to an ARNI, you must stop the ACEi for 36 hours before starting the ARNI.

## Mineralocortoid receptor antagonist (MRA)

* Examples

spironolactone

eplerinone

* Purpose: to stop the heart from becoming weaker
* Common side effects

low blood pressure

high potassium levels

slowed kidney function

dehydration

stomach irritation

gynecomastia in men (painful swelling of the breasts)

* Other important information

Have your potassium level and kidney function checked regularly.

## Cardiac glycoside

* Examples

digoxin (Lanoxin, Toloxin)

* Purpose: to reduce your symptoms of heart failure
* Common side effects

nausea or vomiting

major loss of appetite

blurred vision

yellow, green or white halos around objects

weakness

irregular heartbeat

* Other important information

This medication is used less commonly than the others.

Have your digoxin level checked regularly.