

Heart Failure

This booklet will help you understand more about heart failure (HF) and its treatment. If you have any questions or concerns, talk with your doctor or nurse.

Heart failure symptoms may change over time.

What Is Heart Failure?

The heart is a powerful muscle. When it is healthy, it easily pumps blood to your entire body. In this way, oxygen and nutrients are carried where they are needed and supply you with the energy to carry out your usual activities each day. When HF occurs, the heart's ability to pump blood is limited. The heart muscle may become weak, stiff or thickened which limits how well it can pump blood to the body. It is unable to meet the body's demands. The body tries to make up for the reduced blood flow by making special chemicals (neurohormones), which cause:

- The body to retain fluid
- Your blood vessels to narrow
- Increased heart rate

The narrowed blood vessels make it harder for your heart to work. You may feel more tired. With more body fluid to pump, the heart may become enlarged. Excess fluid may collect in the:

- Lungs
- Legs
- Abdomen

The increased fluid also may affect the kidneys and liver. If HF is left untreated, the heart and other vital organs are unable to work well. Heart failure affects each person in a different way.

What Causes Heart Failure?

The most common causes of heart failure are:

- Coronary artery disease (CAD)
- High blood pressure over many years
- Heart muscle disorders (cardiomyopathies)
- Abnormal heart valves
- Irregular and/or rapid heart rates

Heart failure also can be caused by certain viral infections, alcohol intake, drug abuse, thyroid disease, medicines for treating cancer (chemotherapy) or even pregnancy.

Symptoms of Heart Failure

The most common symptoms of heart failure are:

- Feeling tired
- Difficulty breathing with activity, at rest or while lying flat
- Swelling of the feet and legs
- Lack of appetite
- Decreased energy in doing daily activities

Other symptoms may include:

- Dizziness or fainting
- Nausea, bloating or tenderness in the abdomen
- Rapid weight gain (3 to 5 lbs. or more in 1 week)
- Decrease in urine output
- Chest pain or pressure
- Cough (while lying flat)
- Rapid or irregular heartbeat

Treating Heart Failure

Your doctors and nurses work with you to develop a treatment plan to meet your needs.

Proper treatment may:

- Slow down the disease process
- Reduce or eliminate symptoms
- Help you live longer

Heart failure often is treated with medicines, diet and lifestyle changes. In some cases, certain procedures or surgery may be suggested. Your doctor will discuss these options with you.

Medications

Seven types of medicines are used most often to treat HF.

- **ACE (angiotensin-converting enzyme) Inhibitors/ARB (angiotensin receptor blocker)** dilate (open up) the blood vessels to allow the heart to pump the blood more effectively. These medicines block the effects of harmful stress hormones.
- **Beta blockers** slow the heart rate and block the effects of the neurohormones that can damage the heart.
- **Aldosterone antagonists** block another hormone (aldosterone) produced by the body that can increase HF symptoms.
- **Diuretics** (“water pills”) help rid the body of excess fluid and sodium that causes the body to retain fluid.
- **Digoxin** helps the heart to beat more strongly.
- **Nitrates** relieve chest pain by dilating the blood vessels, which helps in easing excess fluid in the lungs.
- **Hydralazine** also may be used. It works much the same way as ACE and ARB to open up the blood vessels. This allows the heart to pump blood more effectively.

It is important to take your medicines each day as directed. Do not skip doses or stop taking any medicine without talking with your doctor or nurse. To help you keep track of the medicine you are taking, use the chart on the last page of this booklet. It includes areas for medicine name, doses and how often each is taken. Be sure to bring this list to all doctors’ visits. This is very important if medicines are changed or added. Some medicines may affect how HF medicines work or can make side effects worse.

Diet

A diet high in salt (sodium):

- Makes the body retain extra fluid
- Causes the heart to work harder
- Makes the HF symptoms worse

For heart failure patients, a low-salt diet can relieve this added stress to the heart. Some quick tips for reducing your salt intake include:

- When cooking, add spices and herbs for extra flavor.
- Do not add salt to foods at the table.
- Talk with your doctor or nurse about using a salt substitute.
- Select fresh foods rather than prepared items, which often are higher in sodium.

- When shopping, read food labels. Avoid foods that have any of these listed as one of the first three ingredients: salt, brine, MSG, baking powder or any item with the word sodium (e.g., monosodium glutamate).
- Be aware that most lunchmeats, cheese, ham, hot dogs and “fast food” are high in sodium.

Your nurse, doctor or dietitian may provide more detailed diet guidelines. This also may include limiting your fluid intake. (Certain foods count as fluids; e.g., Jell-O™, ice cream, yogurt, pudding and juice in oranges and grapefruits.) If you are to limit fluids, talk with your doctor about using small amounts of sugar-free candy or gum and other ways to help with a “dry mouth feeling.”

As always, follow your doctor’s specific instructions.

Lifestyle Changes

Regular exercise is important to your health. After a hospital stay, slowly increase your activities each day. To conserve energy, consider doing tasks while seated (e.g., folding laundry). During the day, try to walk around every couple of hours. Increase the distance each day. When sitting, elevate your feet on a stool. Vary your activities with planned rest periods. Talk with your doctor about starting an exercise program or joining a formal cardiac rehabilitation program.

Rapid weight gain is a warning sign. It indicates that HF is getting worse. Weigh yourself daily when you first get up in the morning (before eating or drinking, but after urinating). Do this each day:

- At the same time
- Using the same scale
- Wearing the same amount of clothes

Record your weight on a calendar and report any rapid weight gain (2 pounds in 1 day or 3 to 5 pounds or more in 1 week) to your doctor. (See page 6 of this booklet.)

Smoking Cessation

If you smoke or chew tobacco, stop now! (Also avoid exposure to high amounts of “second-hand” smoke.) This is an important part of your heart failure treatment. It will help:

- Protect your heart, blood vessels and lungs
- Reduce HF symptoms

There are many ways to assist with smoking cessation. Please seek advice from your doctor as to the best method for you.

The Wellness Institute at Northwestern Memorial Hospital offers a **Smoking Cessation Class**. Please call 312-926-WELL (9355) for more information.

Procedures/Surgery

Based on your specific needs, other HF treatments may include:

- **Implantable Cardioverter Defibrillator (ICD)** is a device that can protect you against dangerous abnormal heart rhythms. The ICD treats these rhythms by pacing, or shocking, the heart back to a normal rhythm. The ICD also can act as a pacemaker.
- **Cardiac Resynchronization Therapy (CRT):** This special pacemaker stimulates the right and left ventricles to help them contract in sync and pump more effectively.
- **Coronary Artery Bypass Graft (CABG):** Heart bypass surgery creates a detour or bypass around the blocked portion of the artery. This restores the blood supply to the heart muscle.
- **Valve Surgery** is done to repair or replace diseased heart valves.
- **Ventricular Assist Device (VAD)** is a mechanical pump placed during surgery. It takes over the pumping action of one or both of the heart's ventricles. It is used for patients with severe heart damage whose hearts cannot properly pump oxygen-rich blood to the body.
- **Heart Transplant** is offered to patients who have end-stage HF that can no longer be managed through the use of medicines and other therapies.

Your doctor will explain any needed treatments in more detail.

For More Information

While in the hospital, the Northwestern Video On-Demand system provides access to helpful information about heart failure (HF) care. Dial 6-5957 on your telephone or ask your nurse to help you use the system. Some important titles include:

Title # 24: Heart Failure Treatment: Getting Started

Title # 25: Understanding Heart Failure Medications

Title # 28: Nutrition for Heart Failure Patients

Title # 29: Exercise for Heart Failure Patients

Title # 30: Emotions & Heart Failure

Title # 49: How to Beat Cigarettes

Write down and ask questions. If you are unsure of what to ask or are having problems concentrating, talk to your nurse. These same videos are found in the Health Learning Center (3rd floor Galter Pavilion).

If you have financial or other resource needs related to your healthcare, contact Northwestern Memorial Hospital's Case Management/Social Work Department at 312-926-2272.

Follow-Up Care

While you are being treated for HF, your symptoms may change or new symptoms may develop. If this happens, please contact your doctor right away. Following the treatment plan and keeping your doctors and nurses informed about how you feel, especially about sudden changes, is important. Share any concerns, so your doctors and nurses can meet your current needs to ensure your comfort.

Contact your Doctor or Nurse if the following occur:

- Increase in shortness of breath
- Feeling more tired
- Rapid heart rate
- Fainting or “passing out”
- Dizziness when standing or sitting
- Rapid weight gain (2 lbs. in 24 hours or 3 to 5 lbs. or more in 1 week)

Health Information Resources

For more information, visit one of Northwestern Memorial Hospital's Health Learning Centers. These state-of-the-art health libraries are located on the third floor of the Galter Pavilion and on the first floor of the Prentice Women's Hospital. Health information professionals are available to help you find the information you need and provide you with personalized support at no charge. You may contact the Health Learning Centers by calling 312-926-LINK (5465) or by sending an e-mail to hlc@nmh.org.

For additional information about Northwestern Memorial Hospital, please visit our Web site at www.nmh.org.

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