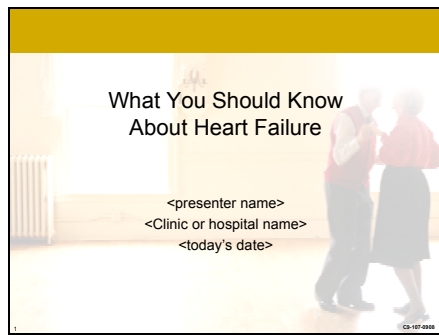


Heart Failure Overview - script

Slide 1

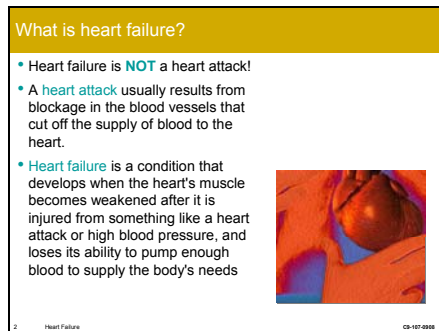


Adapted from HFSA Turnkey patient education materials (2001)

We're here to talk about heart failure, a common condition which affects about 5 million Americans.

Today I will discuss what heart failure is, its symptoms and risk factors, how it affects your body and the importance of early diagnosis and treatment. We'll also talk about some of the latest treatment options and how you can work with your doctor to properly manage the condition.

Slide 2



At first the term "heart failure" can seem pretty scary. You may hear the condition described as an "enlarged heart," a heart with a "little damage" or a "weak heart."

Heart failure is often a misunderstood disease. Many people think of heart failure as a sudden event such as a heart attack. But in fact the two are not the same.

A heart attack usually results from blockage in the blood vessels that cut off the supply of blood to the heart. This means that the heart isn't getting the blood and oxygen it needs, and that causes the sharp pains associated with a heart attack.

Unlike a heart attack, heart failure is not something that occurs suddenly, nor is it typically painful. Heart failure is a progressive weakening of the heart muscle. It is a chronic condition that develops slowly and gets worse over time.

Very simply, heart failure is a condition that occurs when your heart can not pump blood well enough to meet your body's needs. This is generally because the heart muscle is too weak.

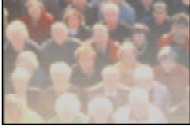
Heart Failure Overview - script

Slide 3

Heart failure does **NOT** mean...

- Your heart has stopped working
- Your heart is about to stop working
- You have had a heart attack

YOU CAN LIVE WITH HEART FAILURE!



Heart Failure ©9-107-0208

It is important to remember that heart failure does not mean that the heart suddenly stopped working or that you are about to die.


Heart failure is not a death sentence.

You can live with heart failure. In fact, millions of people are living with heart failure right now. Together with your healthcare team, you can make your heart's job easier and help yourself feel better too.

Slide 4

Who gets heart failure?

- Men and women affected equally
- Risk increases with age; most HF symptoms first appear between ages 55 and 60
- After age 65, incidence increases
- Higher percentage of African Americans are affected than other groups



National Heart, Lung and Blood Institute.
www.NHLBI.nih.gov, accessed 09/05/08

Heart Failure ©9-107-0208


Heart failure can happen to almost anyone. It is most common in people over 65, and is more common in African-Americans. Also, men have a higher rate of heart failure than women. It is the number one reason for hospitalization for people over age 65.

Men have a higher rate of heart failure than women, but because women usually live longer, the condition affects more women in their 70s and 80s.

Slide 5

What problems arise from heart failure?

- Heart's electrical system may be disrupted, resulting in arrhythmias (irregular heart beats)
- Heart may become enlarged
- Heart may not provide enough blood flow to kidneys
- Ventricles may beat out of rhythm: dyssynchrony



Heart Failure ©9-107-0208

In normal hearts, blood vessels called veins bring oxygen-poor blood from the body to the right side of the heart. It is then pumped through the pulmonary artery to the lungs, picking up oxygen. From there, the blood returns to the left side of the heart. Then it is pumped through a large artery called the aorta that distributes blood throughout the body.

When the heart is weakened by heart failure, blood and fluid can back up into the lungs, and fluid builds up in the feet, ankles, and legs. People with heart failure often experience tiredness and shortness of breath.

Heart Failure Overview - script

Slide 6

How many people have heart failure?

- Heart failure is very common
- Heart failure affects nearly 5 million Americans
- An estimated 400,000 to 700,000 new cases are diagnosed each year



Heart Failure © 107-0808

Heart failure is frighteningly common, but under-recognized. It affects nearly 5 million Americans.

As more people are surviving heart attacks, but being left with weakened hearts, heart failure is the only major cardiovascular disorder on the rise. There are about a half a million new cases diagnosed each year.

Heart failure is the most frequent cause of hospitalization in people age 65 and older.


An estimated \$8-15 billion is spent each year on the costs of hospitalization due to heart failure, which is twice the amount spent for all forms of cancer combined.

However, the use of newer medications has been shown to decrease the risk of hospitalization and death due to heart failure. As awareness about heart failure grows, and more patients are diagnosed and treated early, we will likely see these numbers fall.

Slide 7

What causes heart failure?

- Heart failure results after injury to the heart, risk factors include:
 - Heart attack
 - High blood pressure
 - High cholesterol
 - Damage to heart valves
 - Diabetes
 - Obesity
 - Advancing age



Heart Failure © 107-0808

Heart failure is not something you can catch from someone. In a minute, we'll talk about some of the common symptoms of heart failure. But before we do that, let's start by reviewing the risk factors.

Muscle damage and scarring caused by a heart attack is among the greatest risks for heart failure. Cardiac arrhythmia (irregular heartbeat) also increases heart failure risk.

Uncontrolled high blood pressure increases the risk of heart failure by 200 percent. The degree of heart failure risk appears directly related to the severity of the high blood pressure.

People with diabetes have a two to eight-fold greater risk of heart failure than those without. Women with diabetes have a greater risk than men with diabetes.

A single risk factor is enough to cause heart failure, but multiple risk factors greatly increases the risk.

Advanced age also adds to the potential impact of any heart failure risk.


If you have any of these risk factors you should consult your physician.

Heart Failure Overview - script

Slide 8

What are the symptoms of heart failure?

- Feeling tired?
- Short of breath?
- Are you just getting older or do you have heart failure?



Heart Failure © 107-0808

With over 400,000 new cases of heart failure a year, you'd be surprised that many people are not aware they have heart failure, because some of the most common symptoms of heart failure, such as feeling tired and short of breath, are often mistaken for normal signs of getting older.


Also, people may try to avoid symptoms by making lifestyle changes such as taking the elevator instead of the stair, sleeping with extra pillows or cutting back on their favorite sports.

Slide 9

What are the symptoms of heart failure?

Think **FACES**...

- **F**atigue
- **A**ctivities limited
- **C**hest congestion
- **E**demata or ankle swelling
- **S**hortness of breath



Heart Failure © 107-0808

Let's review some of the warning signs of heart failure. An easy way to remember the symptoms is by using the acronym "FACES: F-A-C-E-S."

"F" stands for fatigue or tiredness. This fatigue is generally brought on by exertion, but in advanced stages of heart failure can occur even at rest.

"A" stands for activity becomes limited or reduced. You may experience an inability to exercise, feel weak or have trouble completing daily tasks.

"C" stands for chest congestion or cough.

"E" stands for edema or swelling in your ankles.

"S" stand for shortness of breath. Some people even wake up suddenly from sleep feeling the need to catch their breath.

If you suffer from any of these symptoms, you should consult your physician about heart failure or make an appointment with one of our physicians that specializes in treating this disease (include local information).


Heart Failure Overview - script

Slide 10

How do I know if I have heart failure ?

Your doctor will run a series of tests:

- Echocardiogram, or "echo"
 - Ejection Fraction
 - Healthy heart = 60% or more
 - Heart failure = 40 % or less
- Electrocardiogram, or "EKG" or "ECG"
- Chest X-ray



10 Heart Failure C9-107-0808

Only your doctor can tell if you have heart failure. When you visit your doctor, he/she will examine your medical history and conduct a series of tests to explore a possible diagnosis of heart failure.

One of most important diagnostic tools for heart failure is called an echocardiogram or ECHO for short. It is a painless and non-invasive procedure that allows your doctor to see inside your heart and can tell you how vigorously or not the heart is squeezing.

An echo tells your doctor what your ejection fraction, or EF, is. The ejection fraction is a measurement of how well your heart is pumping. It represents a percent of blood squeezed out of the heart with every beat.

The healthy heart does not squeeze out 100% of the blood. People with a healthy heart have an ejection fraction of about 55-65%. People with heart failure have an ejection fraction of 40 % or less.

Another test your doctor may run is called an electrocardiogram or EKG. This is also a painless and non-invasive test. Electrical wires with suction cups are placed on your chest, arms and legs to measure how your heart is beating and if there has been any damage to your heart muscle.

Your doctor may also take a chest X-ray. The chest X-ray will show the size of your heart. People with heart failure sometimes have an enlarged heart muscle.

Slide 11

Is there a cure for heart failure?

No, currently there is not a cure

- **BUT, early diagnosis and proper treatment can:**
 - Significantly slow the progression of disease
 - Keep you out of the hospital
 - Save your life!

11 Heart Failure C9-107-0808

While there is currently no known cure for heart failure, available treatments may help patients live longer and keep them out of the hospital.

In a minute, we'll discuss some of the latest treatment options and how you can work with your healthcare team to manage heart failure.

Heart Failure Overview - script

Slide 12

What are the treatments for heart failure?

Experts recommend:

- **Diuretics** or “water pills” - helps control symptoms
- **Digoxin** - helps control symptoms
- **ACE Inhibitors** - can slow down disease progression
- **Beta Blockers** - can slow down disease progression

• This combination of medications has been proven to save lives and keep people out of the hospital.



12 Heart Failure C9-107-0008

A critical part of heart failure therapy involves taking medication. Experts now recommend a multi-drug treatment regimen as part of the standard of care to treat heart failure.


This combination of medications has been proven to help patients feel better, slow the progression of the disease, keep patients out of the hospital and even help them live longer.

Some medications are prescribed to control symptoms caused by the “congestion,” while others are used to slow down the progression of heart failure. Drug therapy can do a lot to make patients feel better and relieve the congestion. It is important to remember that even when the congestion goes away, the heart failure is still there. That’s why it is so important to treat not just the symptoms, but the underlying disease.

Slide 13

Medicines to control symptoms...

- **Diuretics**: decrease fluid retention and reduce swelling
- **Digoxin**: improves blood circulation



13 Heart Failure C9-107-0008

Two of the drugs experts recommend have actually been available for quite some time. The first kind, diuretics, sometimes called water pills, help remove extra fluid in the body and reduce swelling in the legs and ankles.

The second kind of drug - digoxin - helps the heart pump better and improves blood circulation.


While diuretics and digoxin do a lot to help patients feel better, they only treat symptoms and do not slow down the progression of heart failure.

Heart Failure Overview - script

Slide 14

Medicines that save lives...

- **ACE Inhibitors:** dilate or widen blood vessels, increase blood flow
- **Beta blockers:** helps strengthen the heart's pumping ability, blocks the body's response to substances which can damage the heart



14 Heart Failure ©9-107-0308

Doctors are now prescribing two newer drugs - ACE inhibitors and beta blockers - to help slow the progression of heart failure. These drugs have been proven to save lives and keep people out of the hospital.

ACE inhibitors - used to treat high blood pressure and heart failure - widen the blood vessels, which in turn increases the flow of blood. This means that the heart doesn't have to pump as hard to get blood through the body.

Beta blockers - also used to treat high blood pressure and heart failure - help the body from making certain hormones that cause negative effects on the heart and blood flow. These drugs help keep the heart from pumping too fast so it doesn't have to work hard all day long


If you have been diagnosed with heart failure you should talk to your physician about therapy with ACE inhibitors and beta blockers.

Slide 15

What are the treatments for heart failure?

Surgery options can include:

- Angioplasty: reduces blockages in arteries
- Bypass surgery: reroute blocked vessels
- Repair or replace defective heart valve
- Assist devices: mechanical pump takes over job of left ventricle
- Heart transplant



15 Heart Failure ©9-107-0308

Some surgical procedures can correct conditions that are causing heart failure symptoms, such as angioplasty and by-pass surgery.

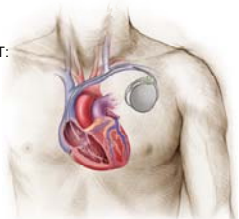
For severe heart failure, patients may require additional oxygen, a mechanical heart pump, or transplantation.

Slide 16

What are the treatments for heart failure?

Implantable devices:

- Defibrillators (ICD)
- Cardiac resynchronization therapy (CRT)
- Combination ICD and CRT: CRT-D



16 Heart Failure ©9-107-0308

Remarkable advances in the technology and function of implanted cardiac devices have been achieved over the past 10 years. The devices also have decreased in size. Now, they are being studied in clinical trials as treatment for patients with heart failure who are at risk of developing heart rates that are too rapid or too slow because of progressive muscle damage that can affect the heart's electrical system.

Heart failure patients may be treated with: permanent pacemakers, hemodynamic monitors, implantable defibrillators (ICDs) or resynchronization devices. Often, one or more of these features can be present in a single or 'combined' device.


Heart Failure Overview - script

Slide 17

Can a person live with heart failure?

YES!!!

- See your physician regularly
- Weigh yourself each day
- Contact your healthcare provider if your weight changes more than 2-3 pound in one day
- Take your medications
- Exercise at levels recommended by your physician



17 Heart Failure CS-107-0908

The good news is that today doctors can do more than ever before to manage heart failure. Remember living with heart failure begins with you - so make sure to check out any symptoms you or a family member might have.

If you do have heart failure, it's important for you to play an active role in managing your condition. You'll want to keep in regular touch with your doctor.

Also, you'll need to watch your diet, particularly your salt intake. Eating too much salt causes the body to retain too much water, making the fluid buildup in heart failure even worse. Eat a low-salt or low-sodium diet to keep your heart failure under control.

If you notice weight gain for two days straight, or if you've gained two or more pounds in one day, you're probably retaining too much water. It's important to call your healthcare provider.


Your heart and circulation can benefit from regular exercise, but be sure to talk to your doctor before starting any exercise program.

Slide 18

Living with heart failure

Heart-healthy food ideas

- Replace salt with herbs, spices
- Don't add salt when cooking food
- Read food labels for salt, fat content
- In restaurants, look for low-salt, low-fat items
- Choose low-salt, low-fat snacks: no-salt pretzels, air-popped popcorn, low-fat frozen yogurt
- Allow time to adjust to less salt



18 Heart Failure CS-107-0908

Eating healthy foods can help improve symptoms and get you back on the road to a full and enjoyable life. Salt, saturated fat, *trans* fat and cholesterol in foods can make your symptoms worse, so avoid them.

Once you learn which foods help you to feel better, you can change your eating habits a little at a time.


Ask your healthcare professional to help you get started. Everyone's case is different, so be sure to consult your doctor about such things as how much liquid to drink each day and how much potassium your body needs. The main thing is to get back to a more enjoyable life. Eating right will help that happen more quickly.

Heart Failure Overview - script

Slide 19

Living with heart failure

- Get enough rest: nap, read, put feet up
- Plan activities so you aren't overly tired
- Exercise as directed by your doctor
- If you smoke, stop!
- Take care of related conditions (diabetes, high blood pressure, etc.)
- Track your weight daily
- Keep your follow-up appointments



19 Heart Failure C9-107-0908

In heart failure, the heart isn't working properly, so many people think exercise will hurt them. But moderate physical activity can actually help the heart get stronger. With daily exercise, most people will find that they don't feel as tired, they have less stress and their energy level increases. Other advantages include weight control or weight loss, better circulation, and lower blood pressure and cholesterol levels. That's a lot of benefits for a little physical effort.


It's important to plan your physical activity with your healthcare professionals. How much exercise you can do will depend on your specific condition. But even a small amount can improve the way you feel and help you have a more positive attitude. If you can enjoy some recreation, family outings or other leisure activities, you'll get more pleasure out of life.

Slide 20

Tips for caregivers

DO:

- Ask for help from family, friends
- Take care of yourself
- Participate in diet, exercise changes
- Learn all you can about heart failure
- Talk about your feelings
- Plan for future changes
- Ask questions
- Find community resources, if needed



20 Heart Failure C9-107-0908

Managing heart failure isn't always easy, and people who've been diagnosed may not be able to do it alone. Physically, they often can't handle all the tasks they once could. The diet and lifestyle changes, medications and depression may be stressful and difficult. Family members and friends provide a much-needed source of care and support.

Becoming a caregiver for someone with heart failure requires a long-term commitment of time and energy. As a caregiver, you need a plan and you need support. You're not alone. The Heart Failure Society of America has provided a guide to get you started, and there are many support groups to turn to both online and in your community. Ask the healthcare professionals involved in the patient's care for contact numbers and help in giving care. And, most importantly, remember that you have to take care of yourself. With proper planning and support, caregiving can be very rewarding.


Heart Failure Overview - script

Slide 21

Tips for caregivers

DON'T:

- Nag
- Blame yourself for loved one's behavior
- Hide information from doctor
- Feel guilty if you need a break



21 Heart Failure C9-107-0908

A survey by the National Family Caregivers Association found that many caregivers grow closer to their loved one and develop newfound inner strength. However, many also reported feeling depressed and isolated, having less personal time and receiving no consistent help from other family members. You need to take these realities into account. Caring for yourself will make you better able to care for someone else.

Make time for yourself. Make time for the activities you enjoy, such as reading, going to a movie, exercising or visiting friends.

Don't blame yourself for your loved one's behavior. If your loved one persistently refuses to follow doctor's recommendations, there's not much you can do. Keep offering support and encouragement, but don't be afraid to ask for help.

Slide 22

Questions to ask your doctor

General

- How can I locate a heart failure specialist?

Lifestyle

- How does my diet affect my heart failure? What changes do you recommend?
- Should I exercise? If so, how much?

Medications

- How long will it take before I feel better on this medication?
- What are the long-term effects of this medication?
- How does this drug work with my other medications?

22 Heart Failure C9-107-0908

Patients with heart failure may work with multiple healthcare professionals. It's important to develop good relationships with all the members of this team. Learn to talk to them openly and honestly and to keep them informed about symptoms or changes in your condition so they can help you. To manage your condition and have a full, active life, follow their recommendations carefully.

Slide 23

Get the most from your appointment

- Be prepared with questions about your heart
- Bring pill bottles
- Bring your medication list
- Heart failure patients: bring daily weights

23 Heart Failure C9-107-0908

With good teamwork and communication, you can improve the quality of your life and feel better. You may also consider having a relative or friend go with you to appointments. Sometimes the stress of the situation may prevent you from getting the most out of your visits. A second person may help to make the visits easier and more productive.

Heart Failure Overview - script

Slide 24

For more information about heart failure, contact...

The Heart Failure Society of America via their web sites:

- Individuals - www.abouthf.org
- Professionals – www.hfsa.org

LifeBeat online is an e-newsletter. It was created to help people with cardiac devices live full, active lives. We provide cardiac news, health tips, and more.

- www.lifebeatonline.com

24 Heart Failure © 107-0908

The Heart Failure Society of America has a web site and toll-free number, both of which can provide you with more information about heart failure. If you have any questions and your physician is not available or if you would like to receive a free video or other information about heart failure, call this number or visit the web site.

Boston Scientific offers LifeBeat online, an e-newsletter. It was created to help people with cardiac devices live full, active lives. We provide cardiac news, health tips, and more.

Slide 25

Q & A

Approximately how many Americans have heart failure and are alive today?

- 1.5 Million
- 2.5 Million
- 4.0 Million
- 5.0 Million

American Heart Association, Heart and Stroke Statistical 2008 Update
25 Heart Failure © 107-0908

Let's review a few of the numbers.

Answer: 5 Million

Slide 26

Q & A

After diagnosis, what percentage of heart failure patients die within five years?

- 20%
- 30%
- 40%
- 50%

American Heart Association, Heart and Stroke Statistical 2008 Update
26 Heart Failure © 107-0908

Answer: 50%

Heart Failure Overview - script

Slide 27

Q & A

What percentage of heart failure deaths is due to Sudden Cardiac Death (SCD)?

- 20%
- 30%
- 40%
- 50%

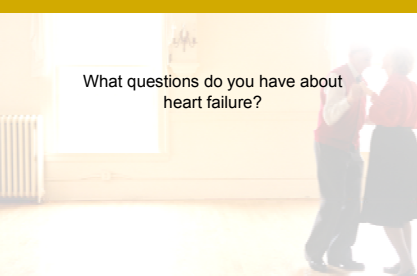
American Heart Association: Heart and Stroke Statistical 2008 Update
27 Heart Failure CS-107-0808

Answer: 50%

Slide 28

Questions?

What questions do you have about heart failure?



28 CS-107-0808

Slide 29

Important Safety Information

Cardiac Resynchronization Therapy Devices

- Cardiac resynchronization therapy pacemakers (CRT-P) and defibrillators (CRT-D) are used to treat heart failure patients who have symptoms despite the best available drug therapy. These patients also have an electrical condition in which the lower chambers of the heart contract in an uncoordinated way and a mechanical condition in which the heart pumps less blood than normal. CRT-Ps and CRT-Ds are not for everyone, including people with separate implantable cardioverter-defibrillators (CRT-P only) or certain steroid allergies. Procedure risks include infection, tissue damage, and kidney failure. In some cases, the device may be unable to respond to your heart rhythm (CRT-P only) or may be unable to respond to irregular heartbeats or may deliver inappropriate shocks (CRT-D only).

Implantable Cardioverter Defibrillators

- An implantable cardioverter defibrillator (ICD) can protect you from the effects of sudden cardiac arrest by reviving your heart rhythm. An ICD is not for everyone, including people with certain steroid allergies. Procedure risks include infection and tissue damage. In some cases, the device may not respond to irregular heartbeats or may deliver inappropriate shocks.

Pacemakers

- A pacemaker system can monitor and treat your heart rhythm by delivering electrical energy to pace your heart when it senses a slow rhythm. A pacemaker is not for everyone, including patients with certain steroid allergies. Patients who have additional medical conditions that may not allow the pacemaker to function appropriately should not receive a device. Procedure risks include infection, tissue damage and kidney failure. In some cases, the device may not respond to your heart rhythm.

For All Devices

- In rare cases severe complications or device failures can occur. Electrical or magnetic fields can affect the device. Only your doctor knows what is right for you. These devices are available by prescription only. Individual results may vary.

Device Quality and Reliability

- It is Boston Scientific's intent to provide implantable devices of high quality and reliability. However, these devices may exhibit malfunctions that may result in lost or compromised ability to deliver therapy. Refer to Boston Scientific's CRT-D product performance report on www.bostonscientific.com for more information about device performance, including the types and rates of malfunctions that these devices have experienced historically. While historical data may not be predictive of future device performance, such data can provide important context for understanding the overall reliability of these types of products. Also, it is important that you talk with your doctor about the risks and benefits associated with the implantation of a device.


(Rev. 6)
29 Heart Failure CS-107-0808

Slide 30

Thank you!

This presentation was sponsored by
Boston Scientific
Cardiac Rhythm Management

We work to improve the quality of life for cardiac patients and those who care for them.



30 CS-107-0808