Understanding
Heart Failure

A DISCUSSION GUIDE FOR PATIENTS AND CAREGIVERS

WHAT IS HEART FAILURE?

Heart failure sounds scary, but it does not mean your heart has stopped working – it means that it is not pumping blood as well as it should. When someone has heart failure, their heart muscle becomes weak or stiff and has difficulty pumping enough oxygen-rich blood to meet the body's needs.

This can lead to complications such as:

- **PULMONARY OEDEMA** (accumulation of fluid in the lungs)
- **HEART RHYTHM PROBLEMS, SUCH AS ATRIAL FIBRILLATION**
- **KIDNEY AND LIVER DAMAGE**
- **FLUID BUILDUP IN VARIOUS PARTS OF THE BODY**
- **HEART PALPITATIONS**

millions **OF PEOPLE ARE LIVING WITH HEART FAILURE IN EUROPE**

HEART FAILURE IS ONE OF THE *most common* **CARDIOVASCULAR DISEASE IN THE WORLD**

IN EUROPE, THE MAIN CAUSES OF HEART FAILURE ARE *coronary artery disease* **AND** *high blood pressure*

HOW THE HEART WORKS

In a healthy heart, freshly oxygenated blood from the lungs is pumped from the left side of the heart to the body (except the lungs). After the body uses the oxygen, the blood returns to the right side of the heart. From there, it is sent back to the lungs to get more oxygen and flows into the left heart — and the cycle continues. The two main pumping chambers in your heart are called ventricles. They keep everything moving smoothly.

CAUSES OF HEART FAILURE

Heart failure can be caused by many conditions, including:

CORONARY ARTERY DISEASE
(also referred to as ischaemic heart disease)

ABNORMAL HEARTBEAT
(arrhythmia)

SEVERE ANAEMIA OR IRON DEFICIENCY

HIGH BLOOD PRESSURE
(hypertension)

CARDIAC AMYLOIDOSIS

DIABETES

CARDIOMYOPATHY

CONGENITAL (PRESENT FROM BIRTH) HEART DEFECTS

CHRONIC KIDNEY DISEASE AND OTHER LONG-TERM CHRONIC DISEASES

HEART VALVE DAMAGE

LUNG PROBLEMS
(severe lung disease or a blood clot in the lungs)

TYPES OF HEART FAILURE

- Heart failure can develop over time, with symptoms coming and going and slowly getting worse – this is called **chronic heart failure**.
- In other cases, it can happen suddenly and severely. This is known as **acute heart failure** and requires immediate medical attention.

Heart failure can occur on the **left side of the heart** or on the **right side**, with left heart failure being more common. However, when one side fails, usually the other will eventually be affected too.

To understand heart failure, it is important to know about the ejection fraction.

WHAT IS EJECTION FRACTION (EF)?

The EF is a way of measuring how well the heart is pumping, and it represents the percentage of blood in the left ventricle that is pumped out during each heartbeat. In a healthy heart, a normal EF is between 50% to 70% — not 100% as some might think.

LEFT-SIDED HEART FAILURE

In this type, the left side of the heart does not work properly, making it harder for the body to get the oxygen-rich blood it needs. There are two types of left-sided heart failure:

1. **Systolic heart failure or heart failure with reduced ejection fraction (HFrRF)**: The bottom chamber of your heart, called the left ventricle, is too weak to pump blood out to your body.
2. **Diastolic heart failure or heart failure with preserved ejection fraction (HFpEF)**: The left ventricle is stiff and cannot relax appropriately, making it difficult to fill with blood.

RIGHT-SIDED HEART FAILURE

Right-sided heart failure is usually caused by left-sided heart failure. The freshly oxygenated blood coming from the lungs to the left side of the heart becomes congested in the lungs, due to left-sided heart failure. As a result, there is less room for the blood going from the right ventricle to the lungs, creating a kind of “traffic jam” in the right side of the heart. This makes it harder for the right ventricle to pump well. When people have right-sided heart failure, fluid backing up in their veins may cause swelling in the legs, feet and sometimes the belly.

HEART FAILURE IS *more common in older adults* BUT IT CAN AFFECT PEOPLE OF ALL AGES

HEART FAILURE CAN HAVE A *major impact* ON DAILY LIFE

EACH YEAR *5 out of every 1000 adults* IN EUROPE ARE NEWLY DIAGNOSED WITH HEART FAILURE

SIGNS AND SYMPTOMS OF HEART FAILURE

Heart failure can affect your daily life because you may experience symptoms such as:

SHORTNESS OF BREATH
especially with physical activity or while lying down or reclining

SWELLING IN YOUR LEGS, ANKLES AND FEET

SUDDEN WEIGHT GAIN

FEELING VERY TIRED OR WEAK

PERSISTENT COUGH

BEING UNABLE TO EXERCISE OR DO NORMAL ACTIVITIES LIKE WALKING UPSTAIRS

INCREASED HEART RATE

LACK OF APPETITE OR NAUSEA

WHEEZING
– a whistling sound when breathing

HOW IS HEART FAILURE MEASURED?

Following diagnosis, your heart failure will usually be classified in two ways: by **stage** and by **functional classes**. Understanding both helps guide the right treatment plan and gives a clearer picture of how the condition might impact your daily life.

STAGES

They go from A to D and describe how much heart failure is present:

STAGE A
(At-risk for heart failure)
High risk for heart failure but no structural heart disease*.

STAGE B
(Pre-heart failure)
Structural heart disease, but no heart failure symptoms.

STAGE C
(Symptomatic heart failure)
Structural heart disease and symptoms of heart failure.

STAGE D
(Advanced heart failure)
Structural heart disease, and symptoms that cannot be controlled despite treatment.

*Structural heart disease = abnormal heart structure or function.

FUNCTIONAL CLASSES

They measure how well a person can manage physical activity. There are **four classes**, going from **Class I** – with no limitation of physical activity, to **Class IV**, referring to someone who is unable to carry on any physical activity without discomfort.

TREATING HEART FAILURE

While heart failure usually cannot be cured, patients may be able to reduce symptoms. Your treatment may include a combination of approaches — discuss with your healthcare provider which medicines, devices, procedures and lifestyle changes are right for you.

LIFESTYLE CHANGES: Adopting healthy habits like **eating nutritious foods**, maintaining a **healthy weight**, engaging in **regular physical activity**, **reducing sodium** (key component of salt) intake, and **not smoking**, can improve your overall well-being and longevity.

MEDICATIONS: Certain medications are targeted to treat the underlying conditions that caused the heart to fail. This could include: antihypertensive medicines to reduce high blood pressure, cholesterol-lowering drugs, antiarrhythmics to control the heart's rate or rhythm and others.

DEVICES: These include **pacemakers** to control heart rate and rhythm, **implantable cardiac defibrillators (ICDs)** that deliver a shock to the heart to correct life-threatening arrhythmia, **cardiac resynchronisation therapy (CRT)** to help the ventricles contract at the same time (sometimes combined with an ICD), **mechanical circulatory support (MCS)** devices to assist the heart's pumping function in advanced cases, and **ventricular assist devices (VADs)** which help pump blood and may be used either as a temporary support while waiting for a heart transplant or as a long-term treatment.

HEART TRANSPLANT SURGERY: In severe cases, when all other treatment avenues have failed to adequately improve the heart's condition, **a heart transplant** may be the only option.

OTHER PROCEDURES: To treat underlying cardiac conditions such as coronary artery disease, heart valve disease, or atrial fibrillation.

QUESTIONS TO ASK YOUR HEALTHCARE PROVIDER

- What caused my heart failure?
- How serious is my heart failure?
- What stage and class is my heart failure?
- What is my ejection fraction?
- What could happen if I do not do anything about my heart failure?
- What changes should I make to my diet and physical activity?
- Are there medications that can help me feel better?
- What treatment options do I have, and what are the risks and benefits of each?
- How can I monitor my heart failure?
- What signs or symptoms should I look for to let me know when to get medical help right away?

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