

# Edema Patient Information

## What is edema?

Edema is the accumulation of fluid in the tissues, most noticeable in the legs (peripheral edema, causing swelling). It can occur in many conditions, including kidney, liver, thyroid, heart, and lung disease. Edema caused by these conditions is usually due to salt retention. If edema occurs in the lungs (pulmonary edema), it causes shortness of breath. Other causes of edema include problems with your veins (insufficiency, dilation or inflammation) and disruption of the lymph flow (e.g., after surgery). If other diseases are excluded, it is called “idiopathic edema” (unknown cause), which is much more common in women.

## How do I know what is causing my edema?

Your doctor will perform a detailed history and physical examination, and order some blood work and urine tests. Based on his or her assessment, other tests may be ordered, such as a chest X-ray or echocardiogram (ultrasound of the heart).

## What findings are helpful?

If the edema “pits” (leaves an indentation after applying pressure), it may be a sign of heart, liver or kidney disease, or by local vein varicosities or inflammation. If your liver is enlarged, it may be a sign of liver or heart disease. If your neck veins are distended, it may be a sign of heart or lung disease. If your heart or breath sounds are abnormal, it is likely a sign of heart or lung disease. Your blood and urine tests will help to know if your kidneys, liver, thyroid, anemia, or other problems may be involved. The absence of any other physical or lab findings suggests a non-pathological (non-problematic) cause, e.g., idiopathic edema.

## How will my edema be treated?

Treatment depends on the cause. No matter the cause, symptomatic treatment may include diuretics (e.g., Lasix, hydrochlorothiazide); however, it is important to note that long-term diuretics can make idiopathic edema even worse. Idiopathic (i.e., when no specific cause is found) peripheral edema is very difficult to treat. Treatment includes elevation of the legs, regular exercise, weight loss, salt moderation, compression stockings, and avoidance of medicines that may be causing it, such as anti-inflammatory medicines (e.g., naproxen, ibuprofen), medicines for high blood pressure (e.g., methyldopa, clonidine, calcium channel blockers, beta blockers), and anti-depressants.

## Sources:

1. Algorithmic Diagnosis of Symptoms and Signs, 2003, Lippincott Williams & Wilkins.
2. Braunwald E, et. al.: Harrison's Principles of Internal Medicine, 2001, McGraw-Hill.