

# What causes lymphoedema and why it matters

Lymphoedema can cause long-term or chronic swelling in the affected area of the body, commonly arms or legs. Here we explain what lymphoedema is and what causes it, to help you learn more about this condition.



Lymphoedema is a term that refers to a long-term or chronic swelling caused by a collection of fluid in the tissues of the body that has been present for three months or more<sup>1</sup>. It can happen anywhere on your body, including your arms and legs.

Normally, the venous system (the veins which carry blood from the tissues of the body back to the heart) and your

lymphatic system (lymph vessels which drain a fluid called lymph from the tissues of the body and return it to the blood) work together to balance the fluid passing between the tissues and veins. Fluid in the veins circulates in the blood, whereas once it is in the tissues of the body, it becomes know as lymph. Between them, the two systems balance the fluid, so that it doesn't collect in one place. However, if one or both of these systems



isn't working effectively, an imbalance of fluid can occur, causing lymph to pool in the tissues where it results in swelling. Oedema means swelling, so lymphoedema simply refers to swelling caused by a build up of lymph.

# **Problems with the pipes**

To understand this more, think of the body as a house with plumbing. The blood vessels are like water pipes bringing water in and out of each room (or the tissues of your body). The lymphatic system is like the drainage system; it collects excess fluid from the tissues (lymph) and returns it to the veins.

If the lymph vessels or 'drains' get blocked or damaged, then this can cause a problem with the ability to handle fluid, just like a blocked or broken pipe would cause a leak in a room. If the drainage system is ok, but fluid can't be passed into the veins because they are damaged or overwhelmed, the fluid will have nowhere to go so will build up in the tissues, which can be likened to flooding.

## Different causes of lymphoedema

There are two types of lymphoedema named according to the type of damage to the lymphatic system (the drainage system). Although the causes of damage may be different, the end result (swelling) is the same.

## **Primary lymphoedema**

Primary lymphoedema is present from birth, although it may not be immediately obvious. It happens because the

lymphatic system didn't develop properly. for example, some of the vessels may be too small or completely missing, putting the existing vessels under more strain to manage lymph flow.

## Secondary lymphoedema

Secondary lymphoedema usually describes damage that has been caused to the normal lymphatic system, or an issue that has overwhelmed it, both affecting its ability to work properly. These can include:

- Infections or cancer treatments which can affect how your lymphatic system works
- Injury or surgery which can damage your veins or lymph vessels
- Problems with the veins not working properly
- Being overweight or pregnant, both can put extra pressure on the vessels in the leas
- Not being able to move around or sitting for long periods, causing gravity to pool fluid into the lower limbs.

If you haven't been given a specific diagnosis of lymphoedema from your healthcare professional, it is important to do this, to make sure a different condition isn't causing the swelling, e.g. heart or kidney disease, problems with your veins, a medication you are taking, or an infection or blood clot both of which need urgent treatment. Once you know you have lymphoedema, it is important to manage it well so the process described here that causes swelling is managed to have a minimal impact on your life.