Physiotherapy Care and Lymphoedema

What is lymphoedema?

Lymphoedema is a chronic swelling which can affect any part of the body, although it is most commonly seen in an arm or a leg.

What causes lymphoedema?

The lymphatics form part of your immune system, helping to deal with infection at a local level but just as importantly, they are responsible for cleansing your tissues and maintaining a balance of fluids in your body.

It can be likened to a waste disposal system, taking tissue fluid, bacteria, proteins and waste products away from the tissues around skin, fat, muscle and bone. Once inside the lymphatic vessels (which initially are barely visible just under the surface of the skin) the tissue fluid becomes known as 'lymph' and it is then transported in one direction by increasingly larger and deeper lymphatic vessels. At some point in its journey, lymph will pass through a lymph node, or gland. Clusters of these nodes are found in the neck, armpits and groins. It is here that the lymph is filtered and cleansed, so that the waste matter and harmful cells can be identified and removed by the body's defence system.

Having passed through these nodes, lymph finally drains back into the large veins of the body at a point just behind the collarbone, on each side of the neck. From here it goes back to the heart and is eventually removed from the body as urine through the kidneys.

If, for whatever reason, the lymphatic system is not working correctly, or the vessels are not draining adequately, the fluid in the tissues builds up (as when a river is dammed and flooding occurs). Lymphoedema can, therefore, be defined as 'an abnormal accumulation of fluid in the tissues'.

Reasons for the lymphatic system not working correctly can include trauma (for example following surgery or radiotherapy), reduced mobility or a blockage of the lymph vessels eg due to a tumour. Lymphoedema caused by disease or its treatment is called Secondary Lymphoedema. Occasionally it occurs because the lymphatic system has not formed properly in which case it is called Primary Lymphoedema.
How do I know if I have lymphoedema?
Lymphoedema may cause the following symptoms in the affected area.

- Swelling
- Sensation of fullness/heaviness
- Tightness/stretching of the skin
- Reduced movement of the joints
- Thickening and dryness of the skin
- Discomfort and pain

Rarely in more severe cases, the skin may become broken and colourless lymph can leak out onto the surface.
However it is important to remember that most people with lymphoedema only have mild symptoms.
If you are worried that you may be developing lymphoedema you should speak to your doctor or physiotherapist as soon as possible.

How can I help to prevent lymphoedema from developing?
If you have had radiotherapy to your groin or armpit, or if you have had surgery to have lymph nodes removed, you are at increased risk of developing lymphoedema.

To minimise your risk you need to take care of your skin and avoid breakages which could become infected (see skin care).

Also you should avoid strenuous, repetitive or prolonged activity with the limb at risk as this causes extra tissue fluid to be formed.

It is important to remember that there is a lifetime risk of developing lymphoedema so this advice must be followed indefinitely.

Can lymphoedema be treated?
Yes. If you suspect that you are developing lymphoedema it is important that you are assessed by a qualified lymphoedema therapist who will advise you on appropriated treatments. The aim of treatment is to relieve discomfort by reducing swelling and to prevent further build up of fluid.

There are 4 main types of therapy.

1. Skin care
Any break in the skin can be an entry site for germs. The protein rich fluid (lymph) in the swollen area acts as an ideal breeding ground for bacteria making it very susceptible to infection.

Here are some tips to help you take care of your skin.

DO
Keep your skin clean, dry and well moisturised with non-perfumed hypoallergenic products
Use high factor sunscreen – never allow the affected limb to become sunburnt.

Wear insect repellent to avoid insect bites when going out in hot weather.

Treat even small cuts and grazes with antiseptic and keep them clean until they heal.

Contact your doctor immediately if a small cut or graze becomes very hot, red and painful. You may require antibiotics.

Use good oven gloves / gardening gloves for cooking and gardening.

**DO NOT**
Allow the affected limb to be used by health professionals for taking blood pressure readings and administering injections, drips, vaccinations and blood transfusions.

Partake in activities which put a heavy strain on your limb such as lifting heavy objects, carrying heavy weights, heavy gardening tasks such as digging etc.

Wear restrictive clothing and tight jewellery. Bras should not be too tight around the ribs or over the shoulders.

2. **Compression**
Compression garments (sleeves and stockings) work by compressing the swollen tissues and preventing fluid from building up.

They also provide support to enable the muscles to pump fluid away more effectively.

A compression sleeve must be properly measured and fitted by a lymphoedema therapist.

If you notice pins and needles, numbness, pain or a change in colour of your fingers/toes the garment is too tight and should be removed.

If the garment is too loose it will not be effective and you should get a smaller size.

Compression garments should be worn all day and removed at night.

3. **Exercise**
One of the most effective ways of treating lymphoedema is through use of exercise. Use the affected limb normally and try to take gentle regular exercise for example walking, swimming or yoga. The limb should not ache with tiredness following exercise. Contact your physiotherapist for further guidance on exercise if needed.

You may find the following techniques helpful for arm swelling.

1. Take a deep breath in through your nose and out through your mouth.
2. Open and close your fingers as if making a fist.
3. Move your wrist up and down as if waving.
4. Turn your palm up to the ceiling and down to the floor.
5. Bend your elbow and straighten it out fully.
6. Raise your arm up over your head and back down.
7. Reach your arm out to the side and back in.

You may find the following techniques helpful for leg swelling
1. Move your foot up and down at the ankle.
2. Circle your foot in both directions.
3. Bend and straighten your knee.
4. Lift your knee up towards your tummy and back down.
5. Lift your leg out to the side and back in.

Contact your physiotherapist for further guidance on exercise if needed.

4. Manual Lymphatic Drainage
Manual Lymphatic Drainage (MLD) is a specialised form of skin massage provided by a trained therapist. It involves a sequence of hand movements which redirect excess fluid away from areas which are blocked, through collateral channels, towards areas which are drained normally.

It is usually performed daily coupled with bandaging or compression garments for an intensive course of about 2-3 weeks.

It is particularly useful if the limb is very large, misshapen or if the skin condition is poor. It is also useful for swelling of the face, breast, abdomen or genitals.

Simple Lymphatic Drainage (SLD) is a modified form of manual lymph drainage that you can be taught to do for yourself.

Diet
If you are overweight your swelling will be far more difficult to treat. You will find that if you gain weight your swollen limb will become worse. Therefore you should try to keep your weight within the normal range for your height by following a healthy balanced diet.

Your lymphoedema is your responsibility. Lymphoedema is a longterm problem. The above advice should be followed indefinitely.
Other useful organisations:

Irish Cancer Society
Northumberland Road, Dublin 4
Tel no: 01-2310500
www.cancer.ie

Lymphoedema Support Network
St. Luke’s Crypt, Sydney St., London. SW3 GNH
Tel no: 004420-73514480

MLD Ireland
www.mldireland.com

MLD UK
PO Box 14491, Glenrothen, Fife, KY63YE
www.mlduk.com