Lymphoedema is a condition that occurs when there is a build-up of lymph fluid beneath the skin resulting in abnormal swelling which does not go down. It happens when the rate at which lymph is produced by the body is greater than the rate at which it drains away. Lymphoedema can affect any part of the body; arms, legs, head, neck, abdomen, chest, genitals and breast.

**The lymphatic system**

The lymphatic system consists of a network of fine collecting vessels all over the body, connected to groups of lymph nodes (glands). The lymphatic vessels transport fluid called lymph which is a waste product formed in the tissues. Lymph consists of proteins, water, bacteria, viruses and other substances not needed by your body. It passes through the lymph nodes where the fluid is filtered and bacteria and other harmful cells are broken down, helping your body to fight infection.

Lymph flows in one direction, very slowly but continuously, from all over the body and eventually enters the bloodstream at the neck.

**Causes of lymphoedema**

There are two classifications of lymphoedema:

**Primary:** This can be present at birth or develop later but is caused by an abnormal lymphatic system where nodes or vessels may be missing or not formed properly. It may run in families and you may remember your parent or other relatives having the same condition.

**Secondary:** This is more common and is a result of damage to the lymphatic system. This may be damage caused by surgery (for cancer or other operations unrelated to cancer), chemotherapy, radiotherapy, burns, severe injury, infection, obesity, venous disease, deep vein thrombosis and immobility.

In either primary or secondary lymphoedema, the free flow of lymph away from the tissues is prevented and the tissues become swollen. If lymph, which is produced by the body all the time, is not moved away, the area will gradually become more swollen, the tissues will harden (fibrosis), and there will be an increased risk of infection (cellulitis) and a thickening and general deterioration in the condition of the skin.
Signs and symptoms
Lymphoedema may be present before you notice any symptoms and researchers are currently trying to develop methods of detecting changes in the tissues before patients notice swelling. This will be useful for patients undergoing surgical techniques or treatment that is known to damage the lymphatics but, often, people with lymphoedema will have gone for years without a diagnosis because the condition is frequently not recognised by health professionals.

Most commonly, swelling of some part of the body will have brought you to the Lymphoedema Clinic. This can start as a feeling of tightness, aching, heaviness and discomfort, and clothing and jewellery may be difficult to get on or off. Pain is not usually a symptom of lymphoedema but may be caused by damage to surrounding nerves following surgery or radiotherapy.

Management of lymphoedema
Treatment of the condition is based on four principles:
- taking care of your skin;
- using the affected area;
- supporting the area with compression garments or bandages; and
- using massage techniques.

If your lymphoedema specialist thinks you need intensive management at the beginning of treatment, these principles will be used and may involve quite frequent visits to the clinic for medical lymphatic drainage (MLD) and lymphoedema compression bandaging. This is known as decongestive lymphatic therapy (DLT) and could last for several weeks.

When a period of intensive management is complete, or if the initial assessment made by the lymphoedema specialist has indicated that DLT is not necessary in your case, the same principles will be used, by you, to manage the condition yourself. This will be the case for life and you will be supported and guided by the Lymphoedema Clinic.
Skin care
Hygiene and skin care are important in lymphoedema to avoid infection. Dry and broken skin can be a route for bacteria to enter the body and cause cellulitis, a serious infection. Fungal infection of the feet and nails should also be treated to avoid cellulitis. Your limb or body part should be washed every day with an unperfumed product and carefully dried. The skin should then be moisturised well. Your lymphoedema specialist will suggest a moisturiser but, generally, unperfumed products are best to avoid irritation.

Exercise
Movement or exercise helps to increase the flow of lymph away from the swollen area. A tight and heavy limb should become easier as you exercise. If you are immobile, do your best to do something to exercise your limb – all movement will help, however limited. Never sit for long periods with a swollen leg down; use a footstool to support it at the height of your bottom and remember to do some ankle exercises to keep the lymph pumping. A swollen arm can be rested on a pillow next to you to make it more comfortable. Don’t use your swollen area excessively; try to get a balance between exercise and rest. Walking is excellent exercise for the lymphatic system. If you have a heavy arm, keep it tucked in a pocket or in the front of your coat when you walk. Deep breathing is also very important to keep lymph moving; your lymphoedema specialist will show you some breathing exercises.

Compression
Compression garments are the most important element of your treatment. If you wear your compression garment as advised by your lymphoedema specialist, you will be able to control your swelling. This external, elastic support provides graduated pressure to the limb, without being constricting or uncomfortable. Garments reduce swelling by limiting the formation of lymph and encourage more fluid to be absorbed back into your system. They give your limb a better shape and allow you to have control of your condition.
There are many different types of compression garment and you will be assessed by your lymphoedema specialist for the most suitable one.

Normally, compression hosiery is worn during the day and removed at night, but your lymphoedema specialist will advise you on any change to this. Swelling to the trunk, genitals or head and neck can be managed with specialised garments.

You should always wear your compression garment when exercising.

If you are having DLT, your lymphoedema specialist will use compression bandages or wraps to reduce the size of your limb and will carry out your skin care and change the bandages every few days. You will be unable to have a full bath or shower during this time.

**Medical lymphatic drainage (MLD)**

This is a special technique used to stimulate the lymphatic system and must be performed by a qualified practitioner with knowledge of the anatomy and physiology of the lymphatic system. A series of hand movements and sequences provides regular stimulation to lymph vessels under the skin which consequently work harder and move lymph away from the problem area. MLD may be used as part of your treatment if your lymphoedema specialist thinks you will benefit from it.

Therapeutic massage or aromatherapy are not substitutes for MLD as they increase blood flow which, in turn, increases lymph production.

As part of your self-care, you will be taught a form of MLD called simple lymphatic drainage (SLD). This should be performed every day and takes about 20 minutes. You should try to do SLD at the same time every day; if you would benefit from doing it more than once a day your lymphoedema specialist will advise you.
What to avoid on the swollen area and precautions to take

• Avoid injections, infusions, blood tests and blood donation. Offer the other limb and don’t be afraid to say “No” if a health professional tells you, “It will be fine”. Avoid having blood pressure taken repeatedly on a swollen arm.

• Try to avoid getting cuts and grazes, burns, sunburn (use a high factor suncream) and scratches or bites from pets. If necessary, clean the area, use an antiseptic cream and cover with a plaster. Wear gloves when washing up or gardening if you have arm swelling. Use oven gloves in the kitchen and for taking food out of the freezer. Take care when cutting and filing your nails.

• Avoid insect bites and stings. Use an insect repellent and treat any bites with antihistamine cream – try not to scratch. Ensure pets are treated for fleas.

• Avoid wearing tight clothing and jewellery which will restrict lymph flow.

• Avoid very hot or cold baths and showers.

• Never walk barefoot if you have leg swelling.

• Don’t use razors blades and hair removing creams – use an electric razor.

• Avoid pushing and pulling heavy loads or carrying heavy bags if you have arm swelling. Avoid standing for long periods if you have swelling below the waist.

Cellulitis

If your swollen area becomes red, hot, painful or you develop a flu-like illness or any combination of these symptoms, you may have developed cellulitis in the skin. This is a serious infection and needs a course of penicillin (or other antibiotic if you cannot take penicillin) for at least two weeks. If you think you have started an infection, you should contact your GP straight away and explain that you have lymphoedema. You should rest, keep warm and drink plenty of fluids as you would for any infection.
Cellulitis damages the delicate lymphatics and so the sooner antibiotic treatment is started, the better. Your compression garment should be removed for a few days until the antibiotics have started to work and you are not in pain. Start wearing it again as soon as you can.

**In conclusion**

Lymphoedema is a chronic, long-term medical condition and is not curable. If left untreated it will progress and become difficult to control. However, with education, advice and support from the Lymphoedema Clinic you will be able to manage your condition, reduce your swelling and maintain your quality of life.

So, remember the key points are:

- look after your skin;
- exercise your limb;
- wear your hosiery; and
- carry out SLD.

**Useful contacts**

**Lymphoedema Support Network (LSN)**
Tel: 0207 351 4480
Website: www.lymphoedema.org

**British Lymphology Society (BLS)**
Tel: 01452 790178
Website: www.thebls.com

**Macmillan Cancer Support**
Tel: 0808 808 0000
Website: macmillan.org.uk

**NHS Choices**
Website: www.nhs.uk/conditions/lymphoedema

**Breast Cancer Care**
Tel: 0808 800 6000
Website: www.breastcancercare.org.uk