

## Lymphoedema

### Introduction

Lymphoedema is a chronic progressive swelling due to the inability of the lymphatic system to maintain normal tissue homeostasis. This results in an accumulation of protein rich fluid in the subcutaneous tissues.

Lymphoedema is one form of chronic oedema. In cancer patients secondary lymphoedema predominates.

### Characteristic features

- Oedema
- Chronic inflammation
- Excess fibrosis (Regnard & Mortimer, 1986)

In the early stages of lymphoedema pitting is demonstrated. With time this feature is lost due to the oedema having a high protein content.

### Assessment and differential diagnosis

(a) Look for the cause of lymphoedema. Rule out the following medical conditions:

- Cardiac failure
- DVT
- Renal failure
- Hypoalbuminaemia
- Vena caval obstruction/portal hypertension

Patients with any of these conditions will initially require specialist medical treatment and may be unsuitable for peripheral oedema management.

(b) Prior to referring for active lymphoedema treatment, ensure arterial supply is adequate by checking:

- peripheral pulses
- colour
- capillary filling time
- temperature
- history of ischaemic pain
- Dopplers

### General care of the patient with lymphoedema

- Promote daily skin hygiene and care to improve skin condition and maintain integrity.
- Treat bacterial and fungal infections promptly
- Treat acute inflammatory episode (cellulitis) with Penicillin V 500mg qds for a minimum of two weeks (if patient allergic use erythromycin). Other antibiotics may be indicated following culture and sensitivity reports.
- It is recommended that patients with recurrent infections should be prescribed prophylactic penicillin. In this case please refer the patient for specialist advice.
- **Do not use affected limb for any medical procedure, e.g. injection, blood sampling, blood pressure.**

## Treatment

Is based on a combination of physical therapies provided by professionals who have received specific training. Usually diuretics are ineffective in the treatment of lymphoedema. There are four core elements to treatment:

- Skin care
- Compression / Support
- Movement and exercise
- Simple lymph drainage self-massage techniques

It is important to refer to a recognised specialist for assessment and treatment. There are local specialist services based at both St Leonard's Hospice & York District Hospital.

- The hospital has recently funded a half time physiotherapist to develop this service. The service will be attached to the Breast Cancer Unit dealing with upper limb problems in patients with newly diagnosed disease.
- The service at St Leonard's Hospice is for patients who have advanced progressive disease, with either upper or lower limb lymphoedema. Some patients may require in-patient bandaging. Out patients at the hospice will be assessed by both a nurse and doctor with a special interest in lymphoedema

For further information the following are useful sources:

British Lymphology Society  
Administrative Centre  
PO Box 1059  
Caterham  
Surrey CR3 6ZU  
Tel: 01883 330253 (Professional Support Group)  
Fax: 01883 330254

Lymphoedema Support Network  
Sidney Street  
London  
SW3 6NH  
Tel: 0171 351 4480 (Patient Support Group)  
Fax: 0171 349 9809

## Further Reading

1. Mortimer, P.S. Investigation and Management of Lymphoedema. *Vascular Medicine Review* 1990; 1: 1-20
2. Regnard C & Mortimer, P Lymphostatic disorders. *British Medical Journal* 1986;293:347-348
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4. Jeffs E. The effect of acute inflammatory episodes (cellulitis) on the treatment of lymphoedema. *Journal of Tissue Viability* 1993; 3 :251 – 55
5. Badger C, Regnard C. 1989 Oedema in advanced disease: a flow diagram In: *Flow Diagram in Advanced Cancer and Other Disease*. Eds: Regnard C, Hockley J 1995 J. Edwards Arnold [London] 60-63.
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7. Website