# Identifying the patient at risk

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People at risk of lymphoedema should be identified early during routine assessment, monitored and taught self care.

Effective identification of patients at risk of lymphoedema relies on awareness of the causes of lymphoedema and associated risk factors, implementation of preventive strategies, and self monitoring. Patients, carers and healthcare professionals should be aware that there may be a considerable delay of several years from a causative event to the appearance of lymphoedema.

## **RISK FACTORS FOR LYMPHOEDEMA**

The true risk factor profile for lymphoedema is not known. There may be many factors that predispose an individual to developing lymphoedema or that predict the progression, severity and outcome of the condition (Box 4). Further epidemiology is required to identify these factors, and research is needed to establish how risk factors themselves can be modified to reduce the likelihood or severity of consequent lymphoedema.

# **BOX 4 Risk factors for lymphoedema**

# Upper limb/trunk lymphoedema

- Surgery with axillary lymph node dissection, particularly if extensive breast or lymph node surgery
- Scar formation, fibrosis and radiodermatitis from postoperative axillary radiotherapy
- Radiotherapy to the breast, or to the axillary, internal mammary or subclavicular lymph nodes
- Drain/wound complications or infection
- Cording (axillary web syndrome)
- Seroma formation
- Advanced cancer
- Obesity
- Congenital predisposition
- Trauma in an 'at risk' arm (venepuncture, blood pressure measurement, injection)
- Chronic skin disorders and inflammation
- Hypertension
- Taxane chemotherapy
- Insertion of pacemaker
- Arteriovenous shunt for dialysis
- Living in or visiting a lymphatic filariasis endemic area

### Lower limb lymphoedema

- Surgery with inguinal lymph node dissection
- Postoperative pelvic radiotherapy
- Recurrent soft tissue infection at the same site
- Obesity
- Varicose vein stripping and vein harvesting
- Genetic predisposition/family history of chronic oedema
- Advanced cancer
- Intrapelvic or intra-abdominal tumours that involve or directly compress lymphatic vessels
- Orthopaedic surgery
- Poor nutritional status
- Thrombophlebitis and chronic venous insufficiency, particularly post-thrombotic syndrome
- Any unresolved asymmetrical oedema
- Chronic skin disorders and inflammation
- Concurrent illnesses such as phlebitis, hyperthyroidism, kidney or cardiac disease
- Immobilisation and prolonged limb dependency
- Living in or visiting a lymphatic filariasis endemic area

#### Cording (axillary web syndrome):

the appearance of tender, painful cord-like structures below the skin; may be due to inflammation or thrombosis of lymph vessels

**Seroma:** an accumulation of fluid at or near a surgical wound