

Chronic oedema results when fluid builds up in the tissues, as a consequence of an ongoing underlying problem that prevents the venous and/or lymphatic systems from maintaining fluid balance. The lymphatics are responsible for clearing fluid from the tissues and returning it to the circulation. If this process is impeded in any way, oedema occurs¹.

Causes

- Overload:** venous system malfunction leads to fluid overloading the lymphatics resulting in failure
- Insufficient lymphatics:** congenital abnormalities can result in the absence of some lymph vessels from birth, or treatment of disease may require the surgical removal of lymph nodes
- Obstructed lymphatics:** lymph nodes or vessels can become obstructed by benign or cancerous growth
- Abnormal lymphatic contractability:** the lymph vessels do not move fluid as well as they should
- Trauma to lymphatics:** damage may occur to the lymphatic system as a result of surgery or trauma
- Obesity:** extra weight in the abdomen can put undue strain on the lymph vessels
- Immobility:** puts undue strain on the lymph vessels
- Chronic venous hypertension:** resulting from failed or damaged valves in the leg veins, can lead to pooling of blood in the legs, resulting in oedema

Risk Factors

- Increasing age
- Lymphatic disorder (congenital malformation of the lymphatic system)
- Surgical removal of lymph nodes
- Radiotherapy
- Tumour obstruction of lymphatic system
- Obesity
- Venous disease
- Heart failure
- Cellulitis
- Prolonged dependency
- Immobility
- General frailty
- Medication
e.g. steroids, calcium channel blockers and gabapentin
- Chronic inflammatory conditions
e.g. rheumatoid arthritis
- Significant trauma to limb
e.g. burns/degloving
- Nutritional status
- Co-morbidity, in particular poly-morbidity²

¹Levick and Michel, 2010 ²BPS, 2008; Newton, 2011; Todd, 2016