

**Secondary Lymphoedema** is a failure of the lymphatic system as a result of damage to a normally functioning lymphatic system and so awareness of possible causes and contributory factors provides potential for prevention and risk reduction.

It is important that individuals who are at risk of lymphoedema understand what lymphoedema is and why they are at risk. This includes those who have been treated for cancer, are obese, have limited mobility, vascular disorders, cellulitis, deep venous thrombosis and chronic wounds (see Lymph Facts: Causes of Lymphoedema). It is also important that patients are fully aware of the signs and symptoms of lymphoedema (Table 1) as well as information on cellulitis. (See Lymph Fact sheet on Cellulitis).

**Table 1: Signs and symptoms that those at risk should look out for**

- Swelling in the 'at risk' limb/ area of the body (even if this goes down at night)
- Heavy feeling or ache in the limb/ area of the body
- Increasing tightness of jewellery
- Red hot area /rash or 'flu-like symptoms that may indicate cellulitis
- Skin changes, thickening or peau d'orange changes (particularly in the breast or abdominal apron)

Those 'at risk' should be given information about what this means by a health care professional backed up with information leaflets (provided by the Lymphoedema Support Network (LSN) [www.lymphoedema.org](http://www.lymphoedema.org)) or local leaflets. For individuals with cancer, the information should be provided **before** cancer treatment begins. A contact number of a key worker should be provided so a prompt referral can be made to a lymphoedema service if required. Ideally the key worker would be able to provide initial advice about managing lymphoedema symptoms and manage anxiety and expectations.

**Information and advice:** Research related to breast cancer suggests that there are three areas that can potentially help to minimise the risk of lymphoedema onset. Expert opinion is that these principles may be applied to the wider population. These are:

**1) Maintaining a healthy diet and weight.**

*The evidence:* An elevated BMI (more than 25kg/m<sup>2</sup>) and weight gain are among the strongest predictors of breast-cancer related lymphoedema progression to more advanced stages (BLS 2015). It is really important that patients are aware that a Healthy BMI will support reducing the risk of developing any form of lymphoedema as well a supporting other health benefits. Indeed referral for bariatric surgery should be considered where appropriate as that may resolve the lymphoedema in some patients.

**2) Effective prevention and management of cellulitis.**

*The evidence:* It is known that cellulitis can be a trigger for lymphoedema in an 'at risk' limb/area. There is evidence that cellulitis can lead to the progression of lymphoedema and risk should therefore be minimised where possible. Thorough, prompt treatment of cellulitis is essential to reduce the risk of long-term problems with cellulitis (Cellulitis Consensus Document 2016 <https://bit.ly/2FNnGoz>). It is therefore important that patients are encouraged to adopt a good skin care regime (i.e. keeping skin clean and moisturising limbs regularly) to maintain skin integrity and informed of how to protect the skin from factors that may cause cellulitis, e.g. tinea pedis.

**3) Exercise, normal use of the limb, including resistance training**

Any type of exercise and movement is good for encouraging lymph flow, provided it is increased gradually, including resistance training. *The evidence:* Lu et al (2015) found that a breast cancer post-operative education and physiotherapy programme incorporating breathing, exercise and scar massage had a greater impact in reducing incidence of lymphoedema than no intervention or education alone. In a Cochrane review by Stuijver (2015) there was evidence that resistance training is safe and does not increase the risk of developing lymphoedema compared to restricted activity (as long as any sign of lymphoedema is treated early). This evidence is important and disproves advice previously given to those treated for breast cancer to avoid repetitive movements and carrying or lifting anything heavy. Indeed, avoidance of activity is likely to lead to more problems and limit range of movement. Advice should be sought from a suitably qualified health care professional if guidance is required.

**Theoretical and anecdotal advice.** It is now recognised that historical advice is not evidence based. In view of concerns over creating 'fear and stress' for patients who are at risk, caution is now recommended. The BLS recommends that emphasis should be on evidenced based facts. However, in supporting patient centred care for those who are at a higher risk of developing lymphoedema the following additional information can be provided as part of a common-sense approach, based on understanding of pathophysiology.

**Table 2: Modified theoretical and anecdotal advice**

- Be aware of the risk from, and prevention of, insect bites and sunburn and the need for prompt treatment should they occur, due to the potential for cellulitis developing, thus keep 'at risk area' well moisturised to maintain skin integrity.
- Take care when removing hair - electric razor can be less traumatic.
- Seek medical advice if a sore / wound does not seem to be healing
- Take care to avoid injury
- There is currently no evidence that manual lymphatic drainage adds any benefit in lessening the chance of developing lymphoedema in those 'at risk' (Stuiver et al 2015)

*For those at risk of upper limb lymphoedema:*

- Use gloves, e.g. when gardening or using a hot oven; to decrease risk of trauma and cellulitis.
- If possible, use contralateral limb for venepuncture/blood pressure monitoring (does not apply in emergencies).

*For those at risk of lower limb lymphoedema*

- Avoid walking barefoot or wearing shoes that may cause blisters

### About the British Lymphology Society (BLS)

The BLS is a membership charity run by and for its members who share its mission:-

To actively promote professional standards and the study, understanding and treatment of lymphoedema / chronic oedema.

Through support of its membership, the Society seeks to achieve high standards of care and equitable access to treatment across the UK, raise awareness of the condition, promote early detection and intervention with supported self management. We work with other stakeholders, advise government, NHS and other professional bodies and organisations to effect change and influence practice.

See <https://www.thebls.com> for helpful resources and the benefits of membership.

### About Lymph Facts

Lymph Facts are a series of documents produced, reviewed and monitored by BLS Members. Please feel free to use these to support your education / awareness raising activities. Every effort is made to ensure the content of Lymph Facts is accurate, up-to-date and appropriately acknowledged or referenced. We would be very greatly to receive feedback on anything that seems inappropriate or incorrect. Please see the website for the full range of Lymph Facts available. We would also welcome offers of contributions to extend the range of Lymph Facts.

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### References

BLS (2015) British Lymphology Society, Treatment Pathway for Lymphoedema Patients with a Body Mass Index (BMI) equal or greater than 40 kg/m<sup>2</sup> (found in resources on BLS website [www.thebls.com](http://www.thebls.com)).

BLS and LSN (2016) British Lymphology Society and Lymphoedema Support Network Expert Panel. Consensus Document on the Management of Cellulitis in Lymphoedema. Found in resources on BLS website: <https://bit.ly/2FNnGoz>

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