

Cancer Related	Treatment options	Rationale/resources/evidence
Surgery - lymph node removal	<p>Encourage early shoulder mobilisation post breast cancer surgery but follow local surgical protocols particularly as shoulder flexion greater than 90 degrees and lifting can be restricted initially depending on type of surgery. Aim to increase ROM first then work on increasing strength gradually with caution, to avoid injury.</p> <p>Refer to local lymphoedema service for assessment as patients who have had lymph node removal are at moderate to high risk of developing oedema</p>	<p>The Role of Physiotherapy after breast cancer surgery – a review 2015 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4348127/pdf/tcrm-11-319.pdf</p> <p>Kwan, Cohn, Armer, Stewart, Cormier (2011) Exercise in patients with lymphedema: a systematic review of the contemporary literature Journal of Cancer Survivors (2011) 5(4): 320-336</p> <p>Recreational exercise with lymphoedema LSN resource on Exercise</p> <p>Incidence of lymphoedema following surgery:</p> <ul style="list-style-type: none"> • Axillary node clearance 30% • Groin dissection for cervical or vulval cancer 20% • Inguinal dissection for penile carcinoma 100% <p>(Davies and Desborough (2008) Lymphoedema, In: Rankin J, Robb, K Murtagh N, Cooper J and Lewis S. (Eds) Rehabilitation in Cancer Care London, Wiley-Blackwell.)</p>
Radiotherapy and scarring	<p>Consider joint tightness and muscle weakness in affected area due to surgical or radiotherapy scars. If scars healed, stretch, mobilise and strengthen as normal. Consider kinesiotape If early or unhealed scars, liaise with surgical teams.</p> <p>Avoid scar massage and manual techniques for first few weeks after radiotherapy due to risk of skin reactions</p>	<p>Macmillan information of side effects of radiotherapy</p> <p>Further article: Karwacinska, J., Kiebzak, W., Stepanek-Finda, B., Kowalski, I.M., Protasiewicz-Faldowska, H., Trybulski, R., & Starczynska, M., (2012). Effectiveness of kinesiio taping on hypertrophic scars, keloids and scar contractures. <i>Polish Annals of Medicine</i> 19, 50-57.</p>
Facilitating self-management	<p>Self-management – advice on skin care, weight management, self-massage and physical activity.</p> <p>Increasing physical activity post cancer treatment can potentially decrease risk of recurrence in some cancers.</p>	<p>Lymphoedema Support Network: Skincare for people with Lymphoedema</p> <p>Macmillan: Move More: physical activity, the wonder drug.</p> <p>Macmillan: The importance of physical activity for people living with and beyond cancer : a concise evidence review</p>

	Women with BMI greater than 30 are 3.6 times more likely to develop lymphoedema post breast cancer surgery	Ridner, S. Dietrich, M. Stewart, B. Armer J. (2011) Body mass index and breast cancer treatment-related lymphedema Supportive Care in Cancer 19(6): 853-857
Palliative – active tumour invading lymphatics/ nerves	Mobilise limb as able. Consider sling or support if neural damage or limb very heavy. Refer to local lymphoedema clinic or hospice	International Lymphoedema Framework and Canadian Lymphedema Framework (2012) The management of lymphoedema in advanced cancer and oedema at the end of life