

## DURING AND AFTER TREATMENT

# Lymphedema: Common Side Effect

Suzanne M. Mahon, DNS, RN, AOCN®, AGN-BC, FAAN, and Ellen Carr, PhD, RN, AOCN®

For lymphedema, standards of care are based on established evidence-based practice.

## Definition

- Lymphedema is the accumulation of lymph fluid that obstructs the flow of the lymphatic system, causing persistent swelling of the affected body part.

## Incidence

- Lymphedema is most commonly seen after lymph node dissection or radiation therapy. It occurs in 10%–40% of patients with breast cancer and 80% of patients with lymph node dissection in the groin.

## Assessment Tools and Recommended Intervals

- Prior to surgery or radiation therapy and at every visit, measure limbs and educate about prevention.
- Inquire about frequency and severity of swelling, impact on activities of daily living, pain, range of motion, and strength.

## Prevention Measures

- Complete medical procedures, such as venipuncture or taking blood pressure, on the nonaffected limb.

## Evidence-Based Interventions and Management

- Delay the initiation of programmed (supervised) exercise for at least seven days following surgery.
- Patients with cancer who are at risk for lower extremity lymphedema should use compression garments.
- Recommend massage of postsurgical scar tissue.
- Among patients with lymphedema, recommend an active treatment intervention (manual lymphatic drainage, compression pumps, resistance exercise, aerobic plus resistance exercise, water-based or yoga exercise, complete decongestive therapy plus resistance exercise plus compression pumps, or complete decongestive therapy plus compression pumps plus aerobic and resistance exercise) in addition to self-management.
- Among patients with cancer treatment-related secondary lymphedema, suggest resistance exercises in addition to self-management.
- Among patients with cancer treatment-related secondary lymphedema, suggest supervised water-based activities or yoga in addition to self-management.

## Agents and Interventions to Avoid

- Evidence is insufficient to support the use of compression garments for prevention of truncal, upper extremity, or head and neck lymphedema.

## Evidence-Based Resources for Providers

- ONS Guidelines™ for Cancer Treatment-Related Lymphedema ([www.ons.org/pep/lymphedema](http://www.ons.org/pep/lymphedema))
- *NCCN Clinical Practice Guidelines in Oncology: Survivorship* [v.3.2021] ([www.nccn.org/professionals/physician\\_gls/pdf/survivorship.pdf](http://www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf))

## Evidence-Based Resources for Patients and Family

- Lymphology Association of North America ([www.clt-lana.org](http://www.clt-lana.org))
- National Lymphedema Network (<https://lymphnet.org>)
- *NCCN Guidelines for Patients: Survivorship Care for Cancer-Related Late and Long-Term Effects* ([www.nccn.org/patients/guidelines/content/PDF/survivorship-crl-patient.pdf](http://www.nccn.org/patients/guidelines/content/PDF/survivorship-crl-patient.pdf))

## REFERENCES

- Armer, J.M., Ostby, P.L., Ginex, P.K., Fu, M.R., Lasinski, B.B., Lockwood, S., . . . Morgan, R.L. (2020). ONS Guidelines™ for cancer treatment-related lymphedema. *Oncology Nursing Forum*, 47(5), 518–538. <https://doi.org/10.1188/20.ONF.518-538>
- Backler, C., Beck, M., & Poage, E. (2020). Lymphedema: Clinical summary of the ONS Guidelines™ for cancer treatment-related lymphedema. *Clinical Journal of Oncology Nursing*, 24(5), 566–570. <https://doi.org/10.1188/20.CJON.566-570>
- National Comprehensive Cancer Network. (2021). *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Survivorship* [v.3.2021]. [https://www.nccn.org/professionals/physician\\_gls/pdf/survivorship.pdf](https://www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf)

Suzanne M. Mahon, DNS, RN, AOCN®, AGN-BC, FAAN, is a professor in the Department of Internal Medicine in the Division of Hematology/Oncology and in the Trudy Busch Valentine School of Nursing at Saint Louis University in Missouri and Ellen Carr, PhD, RN, AOCN®, is the editor of the *Clinical Journal of Oncology Nursing* at the Oncology Nursing Society in Pittsburgh, PA. The authors take full responsibility for this content. The article has been reviewed by independent peer reviewers to ensure that it is objective and free from bias. Mahon can be reached at [suzanne.mahon@health.slu.edu](mailto:suzanne.mahon@health.slu.edu), with copy to [CJONEditor@ons.org](mailto:CJONEditor@ons.org). (Submitted June 2021. Accepted August 26, 2021.)

## KEYWORDS

cancer; symptoms; side effects; late effects; long-term side effects; survivorship care

## DIGITAL OBJECT IDENTIFIER

10.1188/21.CJON.S2.29