

Management of lymphoedema related to head and neck cancer

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Introduction: Head and neck (HN) cancer treatments may have significant acute and/or late side effects that could be physically, functionally, and psychologically debilitating. Head and neck lymphoedema (HNL) is a commonly neglected side effect that remain underdiagnosed and understudied. HNL could manifest externally, internally, or both, and could affect as much as 97% of the patients. HNL may profoundly impact vital physical functions (e.g., breathing, swallowing, and eating). Other cancer related lymphoedema is well addressed with compression therapy. However, current data surrounding the use of HN night compression and its effect on lymphoedema management is sparse.

Aims: To estimate the extent to which the use of compression therapy is helpful in the management of in HNL.

Method: Retrospective analysis of HN patients seen at the MUHC Lymphoedema Clinic between January 2016 to May 2023. At each time-point, an inventory questionnaire was used to assess symptoms and functional restrictions. In addition, lymphoedema was assessed using neck circumferences, facial composites and tragus to tragus measurements. Management of HNL using compression garment, along with body weight (body mass index – BMI) were recorded and compared over time.

Results: A total of 153 HN patients were registered in the institutional database: 108 male (71%) and 45 female (29%), with a mean age of 66 years and mean BMI of 26.2. Due to data missing completely at random, only 108 patients present with at least two time points for follow-up. Of those, 44 patients (41%) were identified as having a compression garment at one point during their follow-up, and only 18 patients continue to wear it in the long-term. Over the period of 12 to 24 months, most of the patients (67%) showed a reduction in all collected measures, with the majority not wearing or using any compression garment.

Conclusion: Our preliminary analysis and observations suggest that, compared to upper and lower limb lymphoedema, patients with HNL tend to be at their worst initially and tend to significantly improve over time. To date, little has been recorded on objectively measuring and recording long-term follow-up for HNL while comparing whether there was compression usage or not. Our analysis indicated that the majority of patients showed a reduction in their HNL despite not using compression garments. Future research is warranted to establish if interventions other than compression therapy play a role in favourable HNL outcomes, such as HN exercises and/or self-massage.