
Individualising patient care in cancer-related lymphoedema

Initiative Type

Service Improvement

Technology

Status

Deliver

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Summary

ICG Lymphatic Imaging is an emerging technique used to visualise functional superficial lymphatic system. With the support of a Metro South SERTA project grant, the PA Lymphoedema Service has

established Australia's first public ICG lymphatic mapping clinic to support individualised lymphoedema treatment planning. The project has successfully navigated healthcare system challenges to deliver change, improvement and innovation in their own health service and was presented at the Clinical Excellence Queensland Showcase 2019.

Key dates

Apr 2018

Implementation sites

Princess Alexandra Hospital

Partnerships

Macquarie University

Key Contacts

Megan Trevethan

2117

paul.blee.hiu

Occupational Therapist

Princess Alexandra Hospital

(07) 3176 5008

megan.trevethan@health.qld.gov.au

Aim

To provide individualised care for patients with cancer-related lymphoedema through the use of ICG lymphatic imaging to inform treatment planning.

Benefits

Increased patient centred care with targeted individualised therapy planning for chronic disease management. Increased patient engagement and confidence in their self management program. *The clinic was placed on hold in March 2020 due to Covid-19 pandemic response.

Background

The lymphatic system functions as a drainage system of fluid as well as an immune system by controlling immune responses. It consists of lymphatics and lymph nodes (LNs), and plays important roles in the pathogenesis of several diseases, such as lymphedema, cancer metastasis, and various inflammatory conditions. Cancer-related lymphoedema affects roughly one in seven people treated for cancer, with incidence estimates varying between 20-83% dependent on cancer type, treatments and diagnostic thresholds. Lymphoedema is known to have a negative impact on a person's quality of life, and has been reported as one of the most severe side effects of treatment for particular cancers. Evidence also highlights that "lymphoedema is a major burden to any health care system because it is chronic, progressive, and requires lifelong treatment".

Solutions Implemented

We have been able to individualise self-management strategies and de-escalate therapy treatment in some cases with the information gained through the use of this procedure. ICG lymphography is performed at the bedside with the patient, to visualise an individual's functional superficial lymphatics. This innovative imaging tool enables both diagnosis and management to be detailed, specific, targeted, efficient and individualised to each person. All patients who underwent the procedure required one or more changes to their therapy management plan. This consistently included alteration to manual lymphatic drainage prescription along with frequent adjustment to coverage, strength or type of compression garment. In some cases, treatment was de-escalated with associated health service cost and patient-burden also reducing.

Evaluation and Results

A 12-month pilot project was conducted with clinic implementation May 2019. The clinic was successfully implemented on a fortnightly basis, and has increased throughput to be able to service 2-3 patients per clinic. A total of 18 clinics have been conducted between May 2019 and May 2020 with 31 occasions of service to March 2020. Patient experience feedback has overwhelmingly demonstrated positive effect to perceived understanding of their health condition and motivation to engage in chronic disease self-management. Feedback highlighted benefits in reducing a person's health-related anxiety and stress associated with their cancer-related lymphoedema and its management. Clinical staff feedback has noted positive benefit to clinical assessment, diagnosis and treatment planning for individualised, person-centred care.

Lessons Learnt

Importance of identifying and maintaining engagement of key stakeholders in all phases of planning and implementation of service change, along with the importance of the organisation culture and priorities in the success of service innovation initiatives.

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