

Customised Pressure Garments for Oedema and Scar Management

Oedema (or swelling) is the build-up of excess fluid in soft body tissues. This can be caused by damage or blockage to the lymphatic system, after surgery (where lymph nodes are removed), or after radiation therapy to an affected area.

Scars are new tissues that replace skin as a wound heals. Abnormal scars occur when the body overproduces collagen at the site of the wound during the healing process, usually after burns, surgeries or injuries. This scar can appear to be raised above the surrounding skin or extend beyond the boundary of the original wound.

If oedema and abnormal scars are left untreated, they can affect a person's ease of movement and their body image. There is also higher risks of skin inflammation and cellulitis that is associated with untreated oedema.

Early intervention increases the likelihood of successful outcomes, which include reduction in the size of swelling and complications to the skin and soft tissues. Scar healing mostly occurs during the first two years, where there is greater improvement in scar appearance (flatter, softer and paler), reducing the impact on joints if the scar extends across it.

How is it treated?

A holistic approach which encompasses various disciplines is adopted in managing oedema and abnormal scarring. The common disciplines involved are Occupational Therapy, Physiotherapy, Plastic Surgery, Gynae-oncology, Medical Oncology and Orthopaedics.

The overall aims of rehabilitation are to reduce the oedema and/or scarring, prevent further complications, and encourage self-management for the condition.

What does rehabilitation involve?

The rehabilitation process often employs a combination of compensatory and therapeutic approaches. After assessment of the individual's condition and daily routine, the Occupational Therapist will customise an intervention programme for him/her. This often includes fabrication and fitting of a customised pressure garment (e.g., sleeves, gloves, pants or stockings).

In NUH, Occupational Therapists tailor-make pressure garments according to the individual's body parts and size. This is necessary for individuals whose limb deviates from the regular contours, in which off-the-rack garments would not provide a good fit. Pressure garments exert prolonged and adequate compression over the affected limb or scar which in turn provides oedema relief and improves the appearance of the scar.

On top of providing pressure garments, Occupational Therapists will also discuss lifestyle modifications to prevent worsening of the condition while going about daily life, explore possible changes in routine to incorporate the use of pressure garment and self-management strategies for individuals to be confident in managing the condition.