Oedema Management in Spinal Cord Injury

INTRODUCTION AND BACKGROUND INFORMATION

Spinal cord injury (SCI) patients are prone to the development of chronic oedema due to gravitational influences on dependent limbs, reduced mobility and therefore reduced muscle pump action.

In 2010, a collaborative Clinic commenced between the Occupational Therapy department at the National Spinal Injuries Centre and Lymphoedema Service at Florence Nightingale Hospice, to address this problem and challenge entrenched views of this being an acceptable and inevitable consequence of SCI.

SKIN CARE

This is of paramount importance and involves:

- Basic hygiene
- Foot care
- Checking for sores
- Pressure points
- Catheter & splint straps which can restrict drainage and cause piloting oedema

EXERCISE

- calf pump, arm, shoulder and hand exercises
- Passive and/or active
- Use of Theraband or Leg Lifters
- Elevation
- Positioning

MASSAGE

- Very light pressure
- Simple lymphatic drainage
- Skin brushing

COMPRESSION

- Short stretch multi-layer bandaging
- Wrapping

CORNERSTONES OF OEDEMA MANAGEMENT

- Basic hygiene
- Foot care
- Checking for sores
- Pressure points
- Catheter & splint straps which can restrict drainage and cause piloting oedema

OUTCOMES

- NSIC patients
  - All referrals since 2010
  - 39 in patients
  - 23 Out patients
- Diagnoses
  - DVT
  - Clotting disorders
  - Venous stasis
  - Other
- Measurements & Benefits
  - Average Reduction
    - Calf Circumference (cm)
      - 1 - 2 (max 4)
      - 1 - 3 (max 5)
      - 2 - 3 (max 10)
    - Foot Circumference (cm)
      - 1 - 2 (max 4)
      - 1 - 3 (max 5)
      - 2 - 3 (max 10)
    - Ankle Circumference (cm)
      - 1 - 2 (max 4)
      - 1 - 3 (max 5)
      - 2 - 3 (max 10)
- Patient Feedback
  - "I can get my legs on for many years."
  - "I can wear my messy years again!"
  - "Happy! Happy!

TESTIMONIAL

I've now been paralysed for nearly 50 years and for the past 20 years I've had problems with excessive swelling in my legs. I tried commercially produced flight socks, keeping my legs elevated and even diuretics but with little success. Over the past few years my legs also began to look unhealthy and my skin turned dark brown. A year ago my spinal consultant referred me to the lymphoedema clinic and I have been seeing Sue Lawrance ever since.

My legs are now looking as healthy as they have ever done since I became paralysed. All the swelling has disappeared and the discolouration has also faded. My legs are now much easier for me or my personal assistants to handle when dressing, bathing or using the toilet. I can now wear fashionable shoes again and I am looking forward to wearing my black patent leather ones at my son's wedding - shoes that I haven't managed to get on for many years.

TESTIMONIAL TWO

For many years following my SCI my feet and lower legs had been fine and were only prone to severe swelling on long-haul flights but over the last few years my feet had taken to turning purple as soon as I got out of bed in the morning and would swell up as the day progressed. The swelling was so severe in the summer months that I looked to wearing 'crock' as I couldn't find anything else that would fit and even these were too tight to remove at the end of the day.

I was also very aware that my feet looked abnormal in colour so would do all I could to hide them away under long-skirts or trousers, and was reluctant to let anyone, even healthcare professionals, see them.

Having been measured and equipped with the correct size knee-length socks by Sue I couldn't believe how quickly the swelling went down in my legs and feet. The skin no longer looked taut and fragile and the colour was always a healthy pink at the end of the day. They were also much lighter to lift when transferring which wasn't a benefit I had expected as I hadn't realised how much heavier they had become over time.

I can now buy shoes from normal shoe shops and no longer worry that the skin may breakdown just for having my feet down all day.

TESTIMONIAL THREE

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MAKING THE DIFFERENCE

Oedema Management is a simple intervention with simple outcome measures which demonstrate an immediate and effective improvement in health, well-being, independence, self-esteem, mood and quality of life.