

Longitudinal Tubular Elastic Compression Alternative and Interprofessional Care Facilitates Patient Self-Management and Discharge from Home Care After 13 Years

*Dr. R. Gary Sibbald^{1,2,3}, James A. Elliott¹, Dr. Reneeka Persaud¹, Patricia Coutts¹, Asfandyar Muffi^{1,4}

1. Toronto Regional Wound Healing Clinic, Mississauga 2. Dalla Lana Faculty of Public Health, University of Toronto 3. Trillium Health Partners, Mississauga 4. University of Ottawa Faculty of Medicine

Background

Team-based, interprofessional, evidence informed care is essential in chronic wound care (1). Lipidema is a diagnosis that is frequently misdiagnosed and misunderstood.

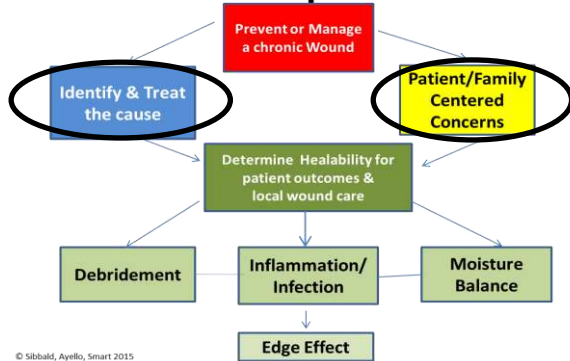
Diagnosis	Details
Lipedema	Excess fat, fat pad around ankles, soft, spare foot
Lymphedema	Excess fibrosis, lymphatic abnormality, +ve Stemmer's sign , recurrent infections
Venolymphedema	Long standing venous disease with Woody fibrosis , +ve Stemmers sign
Lipolymphedema	Longstanding lipedema develops lymphedema

Table 1-Lipedema is frequently misdiagnosed and misunderstood. (2)

Methods

Interprofessional care based on Wound Bed Preparation (figure 1), (facilitated) along with the use of a longitudinal tubular elastic compression alternative*, was utilized to discharge a patient from home care after 13 years.

Wound Bed Preparation 2015



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Figure 1: Wound Bed Preparation 2015, a holistic and evidence-informed approach to wound healing © Sibbald et al. 2015 (1)

An interprofessional assessment took 3 hours of medical and nursing time to identify and develop a plan of care with the patient. Low compression and treatment of unmanaged pain were added to care plan. This tubular elastic bandage system was introduced as a self-care alternative to daily home care nursing visits for dressing changes. Swimming was reintroduced to lifestyle, facilitating exercise and weight loss, addressing patient centered concerns.

*EdemaWear ® Compression Dynamics Omaha, NB

Further Reading:

- Sibbald RG, Elliott JA, Ayello EA, Somayaji R. Optimizing the Moisture Management Tightrope with Wound Bed Preparation 2015. *Adv Skin Wound Care*. 2015;28(10):466-476.
- Fife CE, Maus EA, Carter MJ. *Lipedema*: a frequently misdiagnosed and misunderstood fatty deposition syndrome. *Adv Skin Wound Care*. 2010 Feb;23(2):81-92

Results

Patient

- Initially skeptical to try new product given past experiences
- Education of the diagnosis and treatment was critical
- Gaining confidence helped to build a therapeutic relationship, facilitating adherence to treatment
- Discharged to self care after 13 years of home care

Introduction of this tubular elastic bandage system was key for patient's self-care:

- Facilitated independence
- Enabled exercise and weight loss
- Liberated her to return to swimming

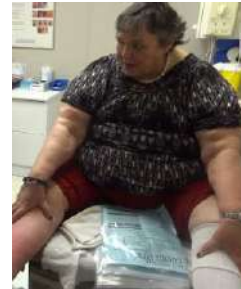


Figure 2: Patient with long-standing lipedema. Patient education and motivation critical to positive treatment outcome. Permission obtained for use of photo (consent on record).

Payers and Health System

Although interprofessional care required an initial investment, change in plan if care led to substantial savings. Treatment cost reduced from an estimated \$10,944 / year to \$280 / year.

Component	Total Costs over 13 years	Average Cost per year	Present Costs per year
Nursing Visits	\$81,448.90	\$6265.30	\$0
*Supplies	\$45,799.00	\$3523.00	\$280.00
**IV Antibiotic Treatments ¹	\$5,050.17	\$420.85	\$0
**Hospitalization ²	\$5,314.25	\$408.79	N/A
**Emergency Room Visits ³	\$4,330.90	\$333.15	N/A
Physiotherapy	\$325.60	\$25.05	N/A
TOTAL	\$142,268.82	\$10,943.76	\$280.00

Table 2: Estimated treatment costs in 2014 CAD \$. Includes IV antibiotic treatments totaling 50 weeks X 3 episodes; hospitalization X 1 episode, emergency department visit X 3 episodes. Derived from estimates from patient, Dr. Sibbald and from Coyte 2001 - An Economic Evaluation of Hospital-Based and Home-Based Intravenous Antibiotic Therapy for Individuals with Cellulitis. Drugs, patient costs, indirect costs, societal costs and quality of life not included in analysis

Conclusions

- Lipedema is frequently misdiagnosed and misunderstood
- Patient education, motivation and trust are key factors
- Interprofessional wound care is an investment that demonstrates cost saving measures and improves quality of life for the patient

Evidence informed team - based interprofessional assessments can improve community - based wound care