

# Treatment of Lower Extremity Edema by Subcutaneous Drainage in Palliative Care of Advanced Cancer Patients

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**Reference:** Bar-Sela G, Omer A, Flechter E, and Zalman D.  
American Journal of Hospice & Palliative Medicine 2010; 27(4): 272-275

## **Abstract**

### **BACKGROUND:**

Lower extremity edema is a problem in patients with advanced cancer, causing decreased physical function and reduced movement.

### **METHODS:**

Eight patients with advanced cancer were treated by subcutaneous needles inserted in the inner and outer sides of the ankles and attached to an enclosed drainage bag, or by creating subcutaneous tracts in both ankles.

### **RESULTS:**

All patients lost weight after 24 hours. A total of 4 patients reported enhanced mobilization and 5 patients had significant improvement of mobilization that improved their quality of life.

### **CONCLUSIONS:**

Subcutaneous drainage can improve edema in the lower limbs or the lower body segment, contributing to patient comfort at this end-of-life period. A prospective study with better evaluation of patient quality of life is ongoing in our center.

### **Strengths:**

- Clinically relevant study that highlights lower extremity edema as a burdensome symptom in end-stage cancer patients and a swift way to treat it.
- Describes the results of using simple controlled drainage intervention to relieve severe lower extremity edema in palliative care patients with advanced cancer.
- Provides a direction for next step in research. Authors have committed to a prospective, using same procedure, with specifically built questionnaire aimed at evaluating improvement in quality of life and determining the harms of the procedure.

### **Weaknesses:**

- This was not a prospective study and no objective evaluation tools were used.
- Small sample size (8), 7 males, 1 female
- Unclear of best practice for selecting patients, optimal timing/duration of the intervention, most effective technique and equipment, and incidence/range of complications of the procedure.
- Improvements in 5 of the 8 patients in terms of mobilization, no comments made on the other 3 patients and their outcomes.
- In patient 2 and 3, who had both treatments done simultaneously, unclear of how one method was determined to be better than the other.
- Evidence supporting subcutaneous drainage is scarce. Possible side effects include failure to improve leg swelling, increased infection risk, and weeping of the sites after removal of needles.

### **Relevance to Palliative Care:**

- Lower extremity edema is a common symptom in palliative care patients, and can be so severe that it not only causes physical disability/discomfort, but emotional distress as well.
- It is important to stay up to date on best treatments for symptom relief.