

# Clinical Experience with an Ultraportable Mechanically Powered NPWT System in the Podiatrist Office Setting

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## INTRODUCTION

Although numerous portable NPWT systems are available today, many of these systems have a number of drawbacks related to their size and bulk, need for an electrical power source, noise level, time-consuming dressing application process, difficult procurement process, and associated costs [1-3]. In addition, many of these systems were designed for larger wounds, not the smaller wounds that are routinely encountered in the typical podiatrist office [4]. These issues make treatment with traditional powered NPWT systems cumbersome. This is especially true in the outpatient office setting where most podiatric patients receive care and procurement of rental-based NPWT systems, which is a difficult and time-consuming process in and of itself. The recent development of a mechanically powered NPWT device that is silent, ultraportable and disposable may make treatment in the office setting easier for clinicians and more convenient for patients.

## METHODS

Potential subjects were screened for eligibility upon referral to, or during routine treatment visits at a private podiatrist office, Bay Area Foot Care, in Castro Valley, CA. Subjects were followed for up to 4 months or to wound closure, whichever came first. On a weekly basis, Visitrak wound tracings were performed and photographs were taken of the wound site.

## SNaP® WOUND CARE SYSTEM



The SNaP® (Smart Negative Pressure) Wound Care System (Spiracur, Sunnyvale, CA) is an ultraportable NPWT device. This system does not require an electrically powered pump. Instead, it utilizes specialized springs to generate continuous negative pressure at the wound bed. Because it is single-use and does not require a rental model for procurement, the SNaP® Wound Care System is available "off-the-shelf" for immediate use just like any other dressing stocked in the podiatrist clinic.

## RESULTS

### CASE 1



**Case 1:**  
40 year old man with a refractory 4.5 cm x 2.0 cm venous stasis ulcer located on the medial side of his left lower leg that had been present for 6 months despite treatment with Unna boot compression and modern dressings like Promogran Prisma Matrix. Subject co-morbidities include smoking, poor nutrition, and lower extremity edema. Complete wound closure was achieved after 3.5 months of SNaP therapy combined with compression. The average dressing application time was 7.6 minutes. While on SNaP therapy, this subject had to continue working 40 hours per week, and was very pleased that he was able to do so with minimal discomfort or annoyance from the SNaP device.

### CASE 2



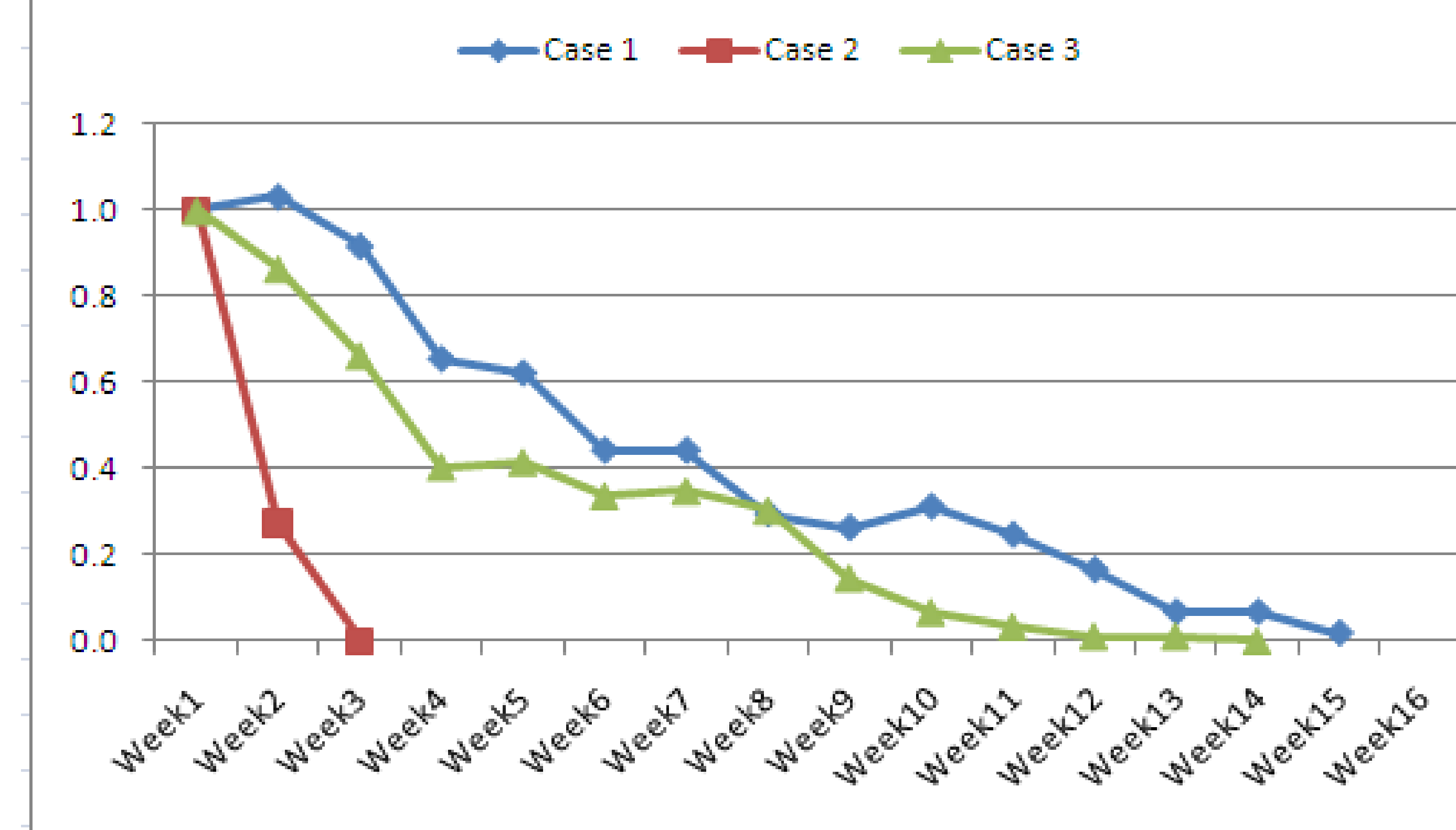
**Case 2:**  
63 year old man with a history of type II diabetes, peripheral neuropathy, and peripheral arterial disease with a 3.0 cm x 0.7 cm diabetic foot ulcer located on the lateral side of his left foot, which had been present for 6 months. Previous treatments for the ulcer included wet to moist dressings. During the study, subject underwent 4 in-clinic dressing/device applications, and the average application time was 7.5 minutes. After only 2 weeks of SNaP therapy, complete wound closure was achieved.

### CASE 3



**Case 3:**  
80 year old male with a history of type II diabetes, peripheral neuropathy, and venous stasis disease presented with an ulcer located on his right lateral ankle, which measured 6.5 cm x 1.7 cm. This wound had been recurring for nearly 1.5 years, and subject's latest recurrence was present for two months. Subject's other co-morbidities include hypertension and severe lower extremity edema caused by venous insufficiency. Previous treatments for the ulcer included Unna boot compression therapy. The average dressing application time was 16.3 minutes. After 3 months of SNaP therapy combined with compression, complete wound closure was achieved. During his previous recurrence one year ago, a similar ulcer took 7 months to completely heal.

Visitrak Data - Normalized Wound Size



## CONCLUSIONS

This small case series demonstrates that the SNaP® Wound Care System was a safe and effective therapy for the treatment of difficult to treat lower extremity ulcers at our clinic. The unique design of the SNaP® System also made it suitable for treatment of smaller lower extremity wounds and wounds earlier in the disease process. The "off-the-shelf" configuration, size, ultraportability and simpler application process of the SNaP® Wound Care System make it ideal for treating small foot and leg wounds often seen by podiatrists in the outpatient population. We found that using the SNaP® device was easy and convenient and well tolerated by our patients.

## REFERENCES

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## FURTHER INFORMATION

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