

Management Of Calcaneous Ischemic Ulcer With Maceration

Clinical Case Study

Introduction

The challenge of healing a calcaneous ischemic (pressure) ulcer is often compounded by a lack of funding for an appropriate support surface. This study follows a young man with an ischemic (pressure) ulcer with surrounding skin maceration. Since his skin breakdown does not involve his trunk or pelvis, funding presented a problem. The E.T. nurse, therefore, looked for a more cost-effective method of support and pressure relief for the calcaneous.

Background

Mr. R.D. is a 30-year-old male with L4-5 paraplegia. He lives at home with his wife and his two small children. He has Factor 5 Blood Dyscrasia and consequently suffered from a stroke in 1996. The stroke rendered paraplegia from the waist down. Mr. R.D. has multiple risk factors for ischemic (pressure) ulcer formation. He is obese, immobile, has altered sensory perception, smokes, has edema of the foot and ankle and has a suprapubic catheter.



Figure 1. Left calcaneous ischemic (pressure) ulcer Stage III. 2 cm x 1 cm with .1 cm depth and .3 cm surrounding maceration. (October 27, 1997)

He is alert and oriented, dependent with transfers and needs moderate assistance with activities of daily living. After discharge from rehabilitation, Mr. R.D. went home with an alternating pressure mattress. Several months after returning home, he developed a stage III ischemic (pressure) ulcer to his left calcaneous (measuring 2 cm x 1 cm with .1 cm depth and .3 cm surrounding maceration (Fig 1).

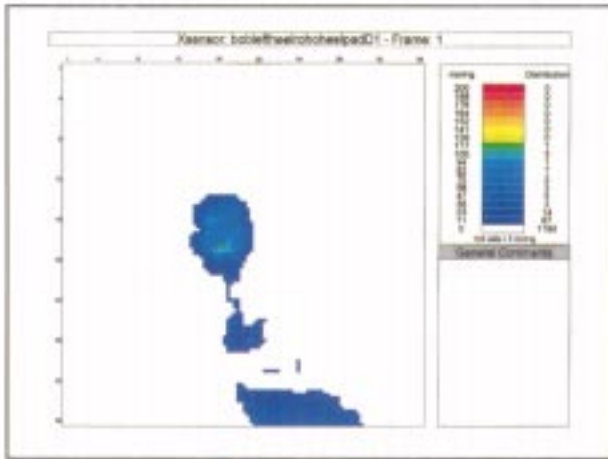


Figure 5. R.D.'s left heel in ROHO HEAL PAD.
(Evaluated using the Xsensor Pressure Mapping System)



Figure 6. Left calcaneus ischemic (pressure) ulcer 100% granulated and healed to closure. (November 17, 1997)

Conclusion

Within less than one month, the calcaneus ischemic (pressure) ulcer healed to closure (Fig. 6) with the use of the therapeutic ROHO HEAL PAD's. Mr. R.D.'s edema in his lower extremities was also greatly reduced due to the compression therapy afforded by the HEAL PAD's. The ROHO HEAL PAD's will continue to be worn by Mr. R.D. to prevent further damage from pressure, friction and shearing forces.

The ROHO HEAL PAD's provide the clinician with a valuable cost-effective alternative for healing when the client **only** exhibits heel breakdown.

Karen B. Presley, R.N., C.E.T.N.

is an enterostomal therapy nurse with Visiting Nurse Association of St. Louis, St. Louis, MO, U.S.A.

Cynthia A. Fleck, R.N., B.S.N., E.T.

was clinical nurse and educator at St. Luke's Hospital; Unity Health System, St. Louis, MO. She is currently wound care specialist and Clinical Applications Manager for CROWN THERAPEUTICS, Inc., Belleville, IL, U.S.A.



Figure 2. Measuring interface pressures with the Xsensor Pressure Mapping System.

Management of Care

Mr. R.D. was seen by the E.T. nurses to evaluate his ischemic (pressure) ulcer on October 17, 1997. Dynamic interface pressure readings were taken using the Xsensor™ Pressure Mapping System (Fig. 2). Peak pressures, located at the calcaneus on the area of skin breakdown, were noted on the alternating pressure mattress (Fig 3). Because of the limitations in coverage regarding ischemic (pressure) ulcers not located on the trunk or pelvis, the E.T. nurse applied the ROHO® HEAL PAD's® to provide both pressure relief as well as compression therapy (Figs. 4 and 5). The E.T. nurse evaluated Mr. R.D. every week.

Wound care consisted of daily cleansing of the wound with SAF-Clens® wound cleanser, applying skin prep to the intact

skin (surrounding skin), filling the wound bed with KALTOSTAT® calcium alginate when the wound was draining, and covering with a Duoderm® hydrocolloid dressing. The wound bed was beefy red with a small island of yellow slough present in the middle of the wound.

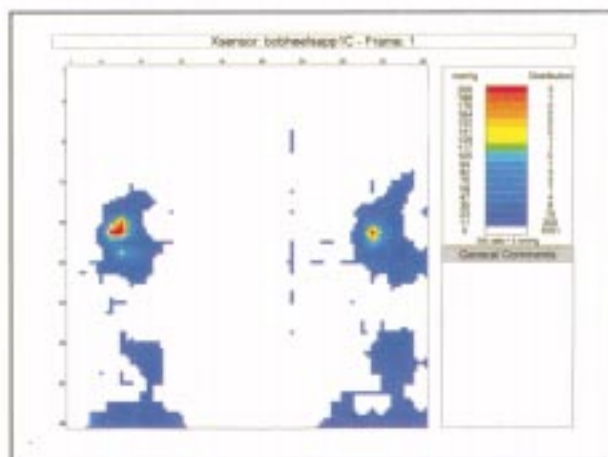


Figure 3. R.D.'s heels on alternating pressure mattress. (Evaluated using the Xsensor Pressure Mapping System)



Figure 4. ROHO HEAL PAD applied bilaterally.



100 North Florida Avenue
Belleville, IL 62221-5429, USA
www.therohogroup.com

U.S. & Canada: 1-800-851-3449 Fax 1-888-551-3449
Outside the U.S. & Canada: 1-618-277-9150
Fax 1-618-277-6518

The following are registered trademarks of ROHO, Inc.: ROHO® and HEAL PAD®.
Xsensor® is a trademark of Xsensor Corporation.
SAP-Clear® is a registered trademark of Convatec.
KALCOSTAT® is a registered trademark of Convatec.
Duoderm® is a registered trademark of Convatec.

© 1998 CROWN THERAPEUTICS, Inc.