A Series of Case Studies in Acute Care and Outpatient Setting Utilizing a Transparent Absorbent Acrylic Dressing* in Partial and Full Thickness Wounds

Maeve M. Curran PT, CWS, CLT; Oscar J. Paz-Altschuld MD, FACS; Cynthia Littlefield RN, WOCN; Marissa G. Ramos, BSN, RN; Sheila J. Zerr, RN; Deborah Ward, BSN, RN, CCRN; Aurita E. Napenas, BSN, RN; Christine Rodriguez MPT, CWS; Katherine Simoes PTA, CWCA; Romel Bayani PTA; Frank R. Ercoli MD, FACS, FCCM; Andrew Fragen MD, FACS; Lawrence Serif, D.O., Desert Regional Medical Center, Palm Springs, CA

Abstract:

The process of wound healing is a complex physiological process designed to restore skin integrity. Wound care practitioners are often challenged to determine the most appropriate and economical dressing that supports wound healing. Considerations in the selection of an appropriate wound dressing include the type of wound, amount of wound exudate and the frequency of dressing changes. A transparent absorbent acrylic dressing* directly addresses these factors. The transparent absorbent acrylic dressing* consists of a patented acrylic polymer pad enclosed between two layers of transparent adhesive film. The bottom layer of transparent film is perforated to allow exudate to pass through the absorbent acrylic pad through a process of diffusion. The top layer of transparent film is breathable and impermeable to liquids, bacteria and viruses. Transparency allows for monitoring of the wound and peri-wound skin without removal of the dressing. The case studies include different types of wounds such as abrasions/lacerations and donor sites. The case studies demonstrate that the dressing maintains a moist wound environment and supports wound healing while reducing the frequency of dressing changes.

Advantages of the clear absorbent dressing over traditional absorbent dressings include:

- Non-bulky design to help prevent dressing roll or lift due to friction from linens, clothing or prosthetics
- Designed not to melt down or leave residue in the wound
- Allows for one-handed targeted placement
- Low-friction surface minimizes potential for friction and shear
- Maintains a moist wound healing environment with low potential for periwound maceration
- Handles up to moderate amounts of wound drainage
- Allows for monitoring of wound progress without dressing removal

Figure 1: Schematic construction of the absorbent clear acrylic dressing* used in these case studies.

Case Study F.R.

- Patient is a 27-year-old male who suffered multiple injuries in a motor vehicle accident. Injuries included lacerations to the right upper extremity and left lower extremity along with compartment syndrome. Post-hospital care is recommended.

Case Study F.H.

- A 79-year-old male suffered multiple fractures including clavicular, femoral and humeral fractures. He underwent hospitalization for 4 days. A foam dressing was applied to the left lower extremity for the next 5 days.

Case Study M.S.

- Patient is a 99-year-old female with very fragile skin who was involved in an accident on 1/22/12. Her medical history includes hypertension, hyperlipidemia and osteoporosis. She underwent a dermatologic consultation on 1/22/12. The patient had undergone soft tissue injury to her right leg and multiple muscle atrophy to her arms. An absorption clear acrylic dressing* was applied to her right lower extremity.

Case Study O.L.

- A 15-year-old female patient was involved in a motor vehicle accident on 1/22/12. Her medical history includes osteoporotic fractures with displacement, left lower extremity compartment syndrome, and a history of left popliteal and radial artery. Post-hospital care is recommended.

Case Study A.P.

- Patient is a 51-year-old male who was involved in a motor vehicle accident on 1/22/12. Past medical history includes hypertension, hyperlipidemia and insulin-dependent diabetes. The patient underwent a dermatologic consultation on 1/22/12. Post-hospital care is recommended.

Figure 6.4.7. Traumatic abrasion to the right elbow of an elderly patient with fragile skin. The wound was treated with the appropriate acrylic dressing* following abdominal improvement by Day 14 (Fig. 6.4) and complete reepithelialization by Day 47 (Fig. 7).

Figure 9.8.5. Donor site wound on Day 8 post-op with the absorbent clear acrylic dressing* placed.

Figure 10.8.5. Donor site wound on Day 8 post-op with complete reepithelialization.

Case Study Conclusions:

Our experience with the absorbent clear acrylic dressing* shows that it:

- Allows for visual inspection of the wound without the need for dressing removal
- Is capable of handling moderate amounts of exudate for extended periods
- Extended wear time with fewer dressing changes reduces the chance of wound reinjury and patient pain, especially with donor site wounds
- Is easy to apply and remove and does not leave residue in the wound
- Allows patient to shower/bathe without removing the dressing and dressing remained intact
- Maintains an excellent moist wound healing environment without causing periwound maceration

Sponsored by:

Health Care

Poster Design by Lutz Consulting LLC

Presented at: The Symposium on Advanced Wound Care, April 19-22, 2012, Atlanta, Georgia