The Impact of utilizing Total Contact Casting on Chronic Wounds of the Foot: Less than 60 Days to Total Healing

Bradley A. Herbst, DPM, Diplomate American Board of Podiatric Surgery; Gene E. Ruckh, DPM, AACFAS; Karen Obermiller, RN, WCC
St. Vincent’s Wound Care Center, Jacksonville, Florida

BACKGROUND AND PURPOSE

The aging population and prevalence of multiple co-morbidities complicate the care of patients with chronic wounds at varying etiologies including diabetic foot ulcers, pressure sores, and wounds related to trauma. Chronic wounds of the foot frequently fail to resolve through the same paradigms in an elderly, frail patient. Additionally it is known that diabetic foot ulcers above affect 2.5 to 10.7% of all diabetics which frequently result in amputations. Off-loading to redistribute pressure is a basic principle in healing chronic wounds of the foot including diabetic, and non-surgical foot ulcers. Options for off-loading include heel rest, wheelchairs, crutches, surgical shoes, custom made, removable cast walkers, nailed foam, dressings, orthotics, and orthopedic footwear. The Total Contact Cast (TCC) is considered the gold standard for off-loading foot wounds. This series of 6 patient cases with a total of 17 wounds provide significant evidence to further validate why TCC is used and continue to be the gold standard for off-loading.

METHODS

The participants had multiple co-morbidities and wounds varying in time of existence from 1 month to 8 months. Each patient’s wound was treated with several different types of wound dressings including skin substitutes, alginates, foams, alginates, and hydrocolloids. All patients were off-loaded utilizing a new quick and easy form of TCC.

RESULTS

By utilizing the approach and methods of TCC allows the healing to finally TCC within a fifteen minute period of time. In evaluating the outcomes it is evident that using TCC has a direct effect on wound healing to include a significant reduction in total days to heal. These 6 patients had an average of 3.5 days to wound healing ranging from an average of 14 days to 25 days. This is significant in compliance with the society of co-morbidities, wound age, and even half of the patients were diabetic. Further research is suggested with a larger collection of wound etiologies, more focused wound dressing applications, and evaluating healing times to ascertain observance.

References

2. “Total Contact Casting.” Vascure, Denver, CO. Preventive Care Inc.

Presented at 2013 Diabetes Live Salvage