

The Use of CurX Antimicrobial on Mixed Arterial/Venous Ulcers

Tammy, Cauthorne-Burnette, MSN, FNP-BC, WCC Lead Nurse Practitioner CareMore of Virginia

Case Study

A 76-year-old black female patient presented to clinic with a mixed arterial and venous ulcer of right lateral lower leg. It measured 6.1 x 2.4mm long with a mixed fibrogranular base. Her medical history is significant for insulin dependent diabetes mellitus type 2, peripheral arterial disease with an ankle brachial index indicative of moderate obstruction, peripheral vascular disease, diastolic congestive heart failure, hypertension, hyperlipidemia, hypothyroidism, and a history of recurrent mixed ulcers over several years.

Mixed Arterial and Venous Ulcers Complicated by Diabetes

The most common etiological factors in chronic wounds are ischemia and neuropathy. Studies have shown that one or both of these conditions is an underlying contributor to 90% of difficult to heal wounds. In this case, the patient's wound is complicated by three major factors: venous ischemia, arterial ischemia, and diabetic neuropathy. Diabetes is known to impair healing by negatively affecting circulation and, when coupled with PAD and PVD, the reduction in nutrient/oxygen rich blood supply often results in stalled wound healing.

Another difficulty in treating mixed etiology ulcers lies in the conflicting treatment protocols. For patients with PVD, the edema and inflammation keeps the wound from healing. Recommendations from the Cochran Review suggest that high level compression should be used to reduce the inflammation and allow for healing. However, in patients with PAD, high level compression can cause extreme pain and tissue necrosis. In patients with both conditions present, this leaves practitioners in a quandary, as current literature suggests mild compression is acceptable, but there are no guidelines available to detail an appropriate pressure threshold. The patient's current health status is also contraindicative to vascular surgery.

Course of Treatment

Initially, patient was treated twice weekly with Silvasorb on Adaptic and with sterile gauze and kling beginning on 11/24/15. Little progress was made; by 1/14/16, improvement had completely stalled out at which time the use of silvasorb and adaptic were discontinued in favor of a CurX centered protocol with gauze and ace wrap for mild compression.

Results

Patient was seen weekly for dressing changes and marked wound improvement was noted after the first week. The wound bed began to granulate appropriately and epithelialization occurred in the first 2 weeks of use. The patient was discharged out of wound clinic on 2/4/16, two weeks ahead of predicted schedule.



1/14/16 CurX First Used



1/21/16: Continued CurX Protocol



1/26/16: Noted Granulation and Epithelialization



2/4/16: Discharged with CurX for Home Use



Post Discharge

Conclusion

CurX Antimicrobial Gel is a topical treatment modality that appears to support rapid granulation and epithelialization of difficult to treat wounds. In the above case, wound healing had stalled with typical standard of care treatments. CurX shortened the expected duration of treatment by two weeks, indicating an economic benefit.