Recalcitrant Wounds Treated with Collagen and Glycerin-Based Dressing

Patrícia Paludo, Paulo Luzio
INSTITUTO DE DERMATOLOGIA PROF. RUBEM D. AZULAY
DA SANTA CASA DO RIO DE JANEIRO - BRASIL

Recalcitrant wounds are very common in dermatology especially after surgical procedures in the legs and in patients restricted to bed. Wounds that do not improve spontaneously usually occur in the older and diabetic patients or when the wound is infected. Another common problem is the development of hypertrophic scars. Wounds treated with occlusive dressings which keep humidity healed up to 40% faster than those left air-exposed and final esthetic result is usually much better. We can also accelerate the cicatrisation process giving collagen to the cells. We have been using this collagen and glycerin based dressing (Stimulen® - Southwest Technologies) since its composition (65% glycerine, 17,5% water; 17,5% polypeptides and modified collagen) has a lot of beneficial effects to cicatrization. Glycerin in high concentration is bacteriostatic and fungistatic avoiding infection. Water keeps humidity turning faster the cicatrization process. Collagen gives to cells amino acids necessary to their multiplication. All these effects together turn the final result more predictable and the formation of hypertrophic scar or retraction usually does not occur even when we were expecting it.

Patient 1) 82 years old female, with a keratoacanthoma of 2x2 cm in the left leg. It was treated by shaving and electro-coagulation. After 3 months there was still an ulcer of the same size of the primary lesion. We started treatment with the dressing. After 3 weeks the ulcer was healed.

The dressing must stay for 2 weeks.

When we take the dressing out the grafts were all in place.

After 3 months we could see where were the micro grafts and a repigmentation halo around then. With this result we made a second surgery to try the repigmentation of the area. Here we see the surgical planning.
Patient 3) 28 years old female with an infected wound in her left thigh. It was the result of a nevus excision 7 days before.

After one week using the dressing there was a very important improvement

After 21 days it was closed and the scar was not hypertrophic.

Patient 4) 62 years old male with a tumor in nose. We did not know if it was a keratoacanthoma or a basocellular carcinoma. We performed a saucerization and left it heal by second intention using the dressing.

After 25 days the cicatrization was complete and there was no scar or retraction of the ala nasi

A good dressing must keep humidity and stimulate cicatrization. If the cicatrization process is faster it is more comfortable and predictable. There were some wounds where we could expect fibrosis or hypertrophic scar and it did not happen. Also very important is to avoid infection. With a high glycerin content the dressing becomes bacteriostatic and fungistatic avoiding infection and usually there is no necessity to use oral or topical antibiotics.

This kind of dressing helps to control factors that can inhibit the healing process, such as necrotic tissue, excess exudate and eschar. In addition, it does not stick to or dissolve into the wound, and does not dry out. Controlling these factors, you reduce the time it takes for a wound to heal and you also assure a positive clinical outcome.