ASSOCIATION OF NOVEL THERAPIES FOR COMPLEX CHRONIC WOUNDS

Debora C. Sanches-Pinto^{1,2,3,4,5}, Cristina C. Houmsi², Mario J. Warde^{3,4,5}, Rolf Gemperli^{1,4}

1Plastic Surgery and Burns, HCFMUSP, Sao Paulo, Sao Paulo, Brazil; 1Plastic Surgery, Hospital Edmundo Vasconcelos, São Paulo, SP, Brazil, 3Plastic Surgery, Hospital Alemão Oswaldo Cruz, São Paulo, SP, Brazil; 4Hospital Israelita Albert Einstein São Paulo, SP, Brazil; 5Hospital Sírio Libanês São Paulo, SP, Brazil. deborasanches29@uol.com.br

Introduction

Chronic wounds are those present for more than 4 weeks failing to produce anatomical and functional skin integrity. They are predominantly a condition of old individuals with chronic illness but we also find several challenges concerning extensive burns, trauma and even seguelae from cosmetic surgery.

Methods and Results:

Four chronic complex wounds treated with the association of new technologies in Brazil to accelerate the healing process successfully as described bellow in all the cases presented.

Case 2: 43 years old, male, type II diabetes, chronic kidney patient on dialysis with recurrence of a right foot lesion after a partial previous amputation. At the first procedure we reduced the ulcer at a minimum size, after a full debridement and local flaps. We filled all the empty spaces with extracellular matrix (Endoform®) and also used V.A.C. therapy®. After one week, we found a full granulation tissue that allowed us to put a skin graft. After 3 weeks the graft became full integrated and the patient was able to go back to his work.



Case 1: 65 years old, female, 30 days after an abdominoplasty and liposuction with the use of Renuvion®, septic, anemic and with 25% of third-degree burn surface area. We started the surgical treatment slowly because of the bad patient's conditions. We used the Cleanse Choice Therapy™ for 3 times, at 48 hours intervals. After that, we finished to debride all the areas and started closing the wounds with local flaps. We also applied dermal matrices (Nevelia®) with V.A.C.® therapy. After the removal of the silicone layer of the dermal matrices we finished the closure with meshed skin grafts. Since there were a few graft losses, we used extracellular matrices (from sheep fore-stomach - Endoform®), covered with calcium alginate plus silver (Silvercel®) and silicone dressings (Mepilex Border®). After 5 weeks we discharged the patient, who was feeling well and with her selfesteem back.







Case 3:

65 years old, female, with an infected donor site with a multiresistant bacteria. After the debridement we used extracellular matrix (Endoform®) with antimicrobial, calcium alginate plus silver (Silvercel®) and silicone dressings (Mepilex Border®). The patient also received systemic antibiotic therapy. After 3 weeks the wound was totally closed with a satisfactory cosmetic result.



Case 4:

66 years old, male, paraplegic after an aortic abdominal aneurism surgery, with an ischiatic pressure sore, treated several times before by other teams, including ours, 3 years ago, successfully.

This time the patient presented a lesion similar to an excoriation with citrine exudate. We found a huge seroma inside a fibrotic capsule and we made all the investigation to rule out osteomyelitis. After closing the wound with local muscle flaps, there was still slough at the edge of the skin. We covered it with extracellular matrix (Endoform®) and Prevena Plus®, in order to prevent dehiscence. We obtained good results both at the incision and around it. After 3 weeks the patient was able to go back to his wheelchair and to his work.













Conclusion: Considering the treatment of complex wounds, after a correct diagnosis made by a multidisciplinary team, we must sometimes join novel technologies in order to give our patient as much comfort as possible, with a faster, discharge and the possibility to make the follow up on an ambulatory basis. This way we found best cost benefit results, not only according to the money spent but also related to the quality of life of our patients, who were able to go back to work soon and fully recovered