THE USE OF SILVER SILICONE DRESSINGS FOR DEEP SECOND DEGREE AND THIRD DEGREE BURNS - THREE CASE REPORTS (P173)

*Sanches-Pinto D. C.[1], Cavalcante de Almeida P. C.[1], Mattar C. A.[2,], Anauate G.[2], Gomez D. D. S.[1], Monteiro-Jr A. A.[1], Gemperli R.[1]

[1] Hospital das Clínicas da Faculdade de Medicina da Universidade de Sao Paulo, Brazil , Divisão de Cirurgia Plástica e Queimaduras, São Paulo, Brazil
[2] Hospital Santa Paula, Sao Paulo, Brazil

Introduction: Deep second degree burns and third degree burns are a challenge for the burn specialists. There is no absolute consensus considering dressings although the use of silver sulfadiazine is widespread worldwide. In Brazil, the use of cerium nitrate plus silver sulfadiazine is the first choice due to its immunological and local properties[1-3]. We use silver soft silicone dressings after the first week post burn in order to minimize the dressing changes, reduce the pain, restore the second deep degree burns and prepare the debrided third degree burns for grafting. These dressings do not adhere to the wound and are almost painless during the regular dressing changes.

Objective: To show the evolution of deep second degree burns and third degree burns with the use of silver soft silicone dressings in 3 cases.

C1: Male, 54 y, 49% BSA (heater explosion) .The patient came from another service, in hemodynamic shock, intubated (inhalation injury). He had to start slow hemodialysis. He did not have any clinical possibility for surgical procedures. He was treated with cerium nitrate plus silver sulfadiazine for 10 days. After that we started to use silver soft silicone, every 72hrs. After three weeks we observed the restoration of the entire affected area, even the extremities (hands and feet) that we initially believed would require surgery. He was discharged on the 48th day, a week after of interrupting the dialysis sessions with full renal recovery and no need for surgery.

C2: Male, 58 y, 55 % burned body surface area, 40% third degree (explosion of chemical products).The patient was drunk, smoking and fell asleep, causing the fire. He arrived conscious, presented a compartment syndrome in his left leg (emergency fasciotomy). He had a leg fracture and seemed to have bone necrosis. He started surgical procedures in the following days after burned: 8th, 11th, 14th, 17th. Immediately after, we initiated skin grafting. All postoperative dressings were with soft silicone with silver. The patient felt great comfort during the dressing changes and showed no pain complaints. The region of the tibia necrosis was treated with the orthopedics team. We applied bovine dermal bilaminar matrix and silver soft silicone dressing plus subsequently negative pressure therapy. Most regions showed good recovery.

C3: Female, 7y, burn combustion of alcohol. 35% burned body surface area, 15% third degree. The burned areas were: chest, arms, legs, face and near the genitals. She was treated for seven days with cerium nitrate plus silver sulfadiazine (daily dressing changes). After the 7th day we started the debridements and the dressings were with silver soft silicone every 72 hours. There was only one skin grafting. The patient was discharged without functional sequelae and with minimal ulcers.

Conclusions: The silver soft silicone dressings seem to be a very good additional option for the treatment of patients with deep second degree burns and patients with third degree burns in preparation for skin grafting. It seems to be less painfull than the regular daily procedures and considered easy to handle and reduces the dressing changes.

References:

1. Allgöwer, M., Schoenenberger, G.A., Sparkes, B.G. Burning the largest immune organ. Burns. 1995;21:S7-S47.
2. Boeckx, W., Blondeel, Ph.N., Vandersteen, K., De Wolf-Peeters, C., Schmitz, A. Effect of cerium nitrate-silver sulphadiazine on deep dermal burns: a histological hypothesis. Burns. 1992;18:456-462.
3. Monafo, L. The use of topical cerium nitrate-silver sulfadiazine in major burn injuries. Pan Med. 1983;25:151-154.