

5th Congress of WUWHS: Firenze TREATMENT OF CHEMICAL BURN IN SURGERY

Authors: Elisabetta Bianco- Marica Sabatelli (nurse)

Nursing clinic Wound Care (A.D.A. Onlus) coordinator: Leonardo Nitti
Castellana Grotte (BA) (ITALY)



Introduction: A 40-year-old man had been injured in his place of work, suffering from chemical burns caused by sulphuric acid (H₂SO₄). He came to observations within the clinic 5 hours after the incident occurred and had been treated in A&E for 4 of the 5 hours. The treatment in A&E concluded of washing the affected area with a saline solution and applying a phytostimuline gauze. The area in concern prior to treatment in A&E was slightly reddened and sore, and there were no signs of blistering. After 4 hours it came to our attention that his condition had worsened with symptoms of severe pain, persistent burning, necrosis and blisters containing a pale exudate.



Method: Treatment packs of concentrated sodium bicarbonate (0.84 g mEq / 10 ml Na + HCO₃ 10) were applied and the necrotic tissue removed, using baking soda as a method of cleaning. The injuries were then blanketed with a lipid-colloidal dressing in which consists of a polyester mesh impregnated with lipid-colloidal particles (Carboxymethylcellulose), vaseline and silver ions all used as the primary dressing, with the secondary dressing being a polyurethane honeycomb ribbon (MOMOSAN®-white)* applied with a thickness of 5mm. These three treatments are performed every 24 hours with the use of the same products such as saline and baking soda to cleanse. The 4th dressing and medication was applied 48 hours from the previous dressing, then the 5th was applied 72 hours from the 4th. With the 6th and final dressing the area was also treated with a spray applicated oil composed of 99% Corpitinol 60 = hyperoxygenated glycerides of essential fatty acids, rich in linoleic acid (60%) and Vitamin E (tocopherol acetate).



Results: After 6 dressings applied over 11 days the results have shown to be very promising. considering the age of the patient, this has been achieved through appropriate treatment and medication.

conclusion: After 20 days the results are excellent with the integrity of the skin showing no sequelae and scars.

References:

- 1) *EVALUATION AND WOUND CARE OF BURNS -a document positioning AIUC [Dr. Antonella Frassetto] 02 October 2014.*
- 2) *Hetti aratc h y n i S. Papi R. ABC of burn. Inii the t in the management of major burn: II - assessment. and resuscitation. BMJ 2004; 329: 101-3.*
- 3) *Hi h storage aratchy S, D and the ki ziewulski p. ABC of burn. Pathophysiology and types of burns. BMJ 2004; 328: 1427 - 1429.*

* Brandname added by sponsor