INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

TOPICAL SODIUM CHLOROSUM (FORMERLY DAC N-055) FOR TREATMENT OF LUPOID LEISHMANIASIS

Sara Molkara [1] - Elaheh Poursoltani [1] - Kurt-wilhelm Stahl [2] - Masoud Maleki [1] - Ali Khamesipour [3] - Christian Bogdan [4] - Maryam Salehi [5] - Vahid Mashayekhi Goyonlo [1]

Cutaneous Leishmaniasis Research Center, Mashhad University Of Medical Sciences, Dermatology, Mashhad, Iran (islamic Republic Of) [1] - Promoting Access To Care With Essential Medicine (pacem), Non-profit Non-governmental Organization, Promoting Access To Care With Essential Medicine (pacem), Freiburg, Germany [2] - Center For Research And Training In Skin Diseases And Leprosy, Tehran University Of Medical Sciences, Center For Research And Training In Skin Diseases And Leprosy, Tehran, Iran (islamic Republic Of) [3] - Mikrobiologisches Institut – Klinische Mikrobiologie, Immunologie Und Hygiene, Friedrich-alexander-universität (fau) Erlangen-nürnberg Und Universität, Immunologie Und Hygiene, Erlangen, Germany [4] - Clinical Research Unit, Ghaem Hospital, Mashhad University Of Medical Sciences, Community Medicine, Mashhad, Iran (islamic Republic Of) [5]

Background: Lupoid leishmaniasis (LL) is resistant to conventional treatments. Sodium chlorosum, a preparation of pharmaceutical sodium chlorite (NaClO2) has been successfully used for the treatment of ACL lesions in Afghanistan.

Objective: This clinical trial study aimed to evaluate the therapeutic effect of a topical preparation of sodium chlorosum on LL.

Materials and Methods: 20 LL patients (12 women and 8 men) from Iran were included in the study. A magistral preparation of sodium chlorosum (10 mM NaClO2 in amphiphilic basic cream) was applied twice daily to the lesions for 6 weeks and continued up to 12 weeks in patients who showed a clinical response within the first 6 weeks. Wherever possible, responders were followed up for one year. Lesions were photographed during weekly visits. Disappearance of erythema and indurated lesions was rated as complete clinical response.

Results: patients with a mean age and lesion history of 28.6 (±24.3) and 3.8 (±1.4) years, respectively, were treated for an average of 7.9 (±1.8) weeks. At the end of the treatment period (12th week), a complete response was observed in 9 of 20 patients (45%). During the one-year follow-up period, LL lesions recurred in 4 of these 9 patients (with one patient showing only a tiny lesion) whereas the other four remained completely lesion-free. Mild

temporary side-effects such as erythema and itching were seen in 4 of 20 patients (20%).

Conclusion: Topical sodium chlorosum showed promising therapeutic results and can be considered as safe, painless and relatively effective treatment for LL.