

## Research Article

### Dermatitis Solaris: New in Treatment

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#### Abstract

At seaside resorts, dermatitis Solaris develops as a response to intense solar radiation combined with the effect of salt water on the skin.

Solar dermatitis is associated with damage to the DNA of skin cells by ultraviolet radiation. Sunburn is always a precursor of solar dermatitis.

Between May 15th 2000 and August 31st 2024, we treated 5478 patients with dermatitis Solaris. 1352 were men, 3910 were women and 216 children. The ages ranged from 4 to 72 years old.

Combined use of 10% Povidone Iodine ointment, corticosteroids and antipruritic medicine was the most effective. The treatment is not expensive and gives a quick recovery.

**Keywords:** Photosensitivity; Erythema Solaris; phototoxic dermatitis; Phototoxic dermatitis; skin.

#### Introduction

The mechanism of dermatitis Solaris has not been sufficiently studied, but there is definitely damage to skin cell proteins and first of all nucleic acids with impaired immune system function by ultraviolet part of the spectrum UVA and UVB (1). Sunburn is always a precursor of solar dermatitis. Factors contributing to the appearance of dermatitis are the use of certain antibacterial drugs (tetracyclines, quinolones, sulfonamides, griseofulvin, nitrofurantoin), antidepressants, NSAIDs (piroxicam, naproxen, etc.), diuretics (furosemide) and others (2,3,4). Dermatitis evolving in first 6 hours, reaches its maximum in 12-24 hours. Patients complain of itchy skin rashes. Itching - from mild to unbearable. Upon visual examination, three types most common forms of rash can be distinguished:

- The first type is erythematous - reddening of the skin of varying severity, against which a rash in the form of small nodules is revealed.
- The second type of rash often has a favorite localization on the chest and calf's shins and looks like purpura due to capillary hemorrhages.
- The third is characterized by a rounded rash, sometimes pointed nodules up to 2 cm in size. The papules protrude slightly above normal or slightly reddened skin.

#### Material

Between May 15th 2000 and July 30th 2024, we treated 5478 patients with dermatitis Solaris. 1352 were men, 3010 were women, and 216 children. The ages ranged from 4 to 72 years.

#### Methods

Treatment of dermatitis Solaris is similar to the treatment of sunburn with our method. (J Medi Re Heal Sci. Alexander M.Toumanidis. Sunburn: New in Treatment. Doi: 10.47991/2996-7449/AJMRHS-113.17 Δεκ 2024). After a warm shower, a thin layer of 10% Povidone Iodine ointment applied on dry and clean skin. After 6 hours, the procedure is repeated and the ointment applied again for 6 hours. Quite often a single application of the ointment is enough, especially in children. Using 10% Povidone Iodine ointment more than 3 times is undesirable, as it causes excessive dryness of the skin. At the same time prednisolone or methylprednisolone pills are prescribed in small doses (8-10 mg) up to four-six times a day. After two or three application of Povidone Iodine ointment corticosteroids cream necessary to use which is applied 2-3 times a day after hot shower. Corticosteroid pills are prescribed to children only for severe forms of solar dermatitis. For relieving itching, one or two times a day of Hydroxyzine hydrochloride not exceeding 25 mg per dose has proven very well.

#### Results

According to the author's method, complete healing of dermatitis Solaris of the first and second types occurs in 12- 36 hours gives very good results and only with the third type treatment can last for 3-4 days.

#### Conclusion

Combined use of 10% Povidone Iodine ointment external and internal therapy with small doses of corticosteroids and Hydroxyzine hydrochloride is very efficient. It can be assumed that Povidone iodine ointment cures sunburn and corticosteroids cures the allergy component. In 36 cases (they were not included in the statistics) the method was used for various forms of chronic dermatitis and showed good results. Further research is

needed. The cost of treatment does not exceed 3€ (in Greece) and gives a quick recovery. Correctly use sunscreens along with optimal time spent in the sun is very important to preventing skin cancer [5].

The study was not funded Covering letter

This treatment method may be needed for millions of patients.

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