



PAEDIATRIC DERMATOLOGY

THE STUDY OF THE EFFECT OF BALNEOTHERAPY COURSE ON THE LEVEL OF CHILDREN'S SKIN MOISTURE

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Introduction: Balneotherapy is widely used in cases of psoriasis, atopic dermatitis and eczema – dermatoses, which are accompanied by dry skin. The effect of baths with highly mineralized salt on the skin moisture in the conditions of the continental climate of Western Siberia has not been studied enough.

Objective: to investigate the effect of balneotherapy course on the level of skin moisture in children with dry skin.

Materials and methods: A group of 15 children (3 boys, 12 girls) aged 7 to 14 years (the average age - 10.4 ± 0.7 years) with dry skin without dermatoses was formed by random sampling in Sanatorium" Krasnozersky, Novosibirsk region. The children underwent a course of balneotherapy - 10 daily procedures for 10 minutes using 2% Rapan salt solution. Corneometry using the device Soft Plus (Callegary, Italy) was performed in face, limbs and body regions before and 30 minutes after each procedure. Indicators of corneometry in range of 45.0-65.0 cu correspond to normally moisturized skin, 15.1-45.0 cu - moderately dry skin, less than 15.0 cu - dry skin.

Results: The level of skin moisture before the beginning and 30 minutes after 1st and 10th procedures changed in the area of hands (19.6 ± 3.7 and 10.9 ± 3.7 to 18.8 ± 3.7 and 16.3 ± 3.7 cu), forearm (13.6 ± 1.3 and 9.6 ± 1.5 to 12.9 ± 1.3 cu and 13.5 ± 1.5 cu), cheeks (31.6 ± 2.5 and 38.2 ± 3.4 to 29.8 ± 2.9 and 31.7 ± 3.5 cu), chest (42.6 ± 3.7 and 40.2 ± 4.1 to 35.5 ± 5.4 cu and 34.8 ± 4.0 cu), forehead (38.4 ± 3.7 and 38.9 ± 2.7 to 27.7 ± 2.4 and 36.4 ± 4.6 cu), chin (42.8 ± 4.5 and 37.5 ± 3.7 to 33.9 ± 4.3 cu and 32 ± 5.7 cu), back (39.4 ± 2.6 and 38.9 ± 3.2 to 26.4 ± 5.0 cu and 25.4 ± 5.4 cu), shins (14.3 ± 1.9 and 10.3 ± 1.6 to 10.4 ± 1.9 cu and 9.3 ± 1.6 cu).

Conclusions: The moisture content of the stratum corneum of children with dry skin after a course of balneotherapy decreased in all areas, except for hands and forearms.

