

# Thermal treatments and dermatoses: Evidence of thermal cosmetic as an adjuvant

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## Introduction

Despite the various therapeutic applications and recommendations to the use of thermal waters in the prevention and/or treatment of various affections in several areas, several studies have confirmed the ability of the thermal waters to improve certain skin affections.

The aim of this study was to assess the knowledge and the perceived benefits of thermal treatments in 74 patients from 2 Portuguese thermal spas, which have approved dermatological therapeutic indications. By another hand, it was intended to verify if the use of cosmetic products containing thermal water is an adjuvant of the thermal treatment and assess the individual perception of the benefits of using these products together with the thermal treatments.

## Methods and results

A self-administered questionnaire was used as a data collection instrument. This collection took place in the Cró (Guarda) and Carvalhal (Viseu) thermal spas between April and November 2014.

From the participants, 58.1% were female, with an age average of 45 years (SD=16). Most of the participants that attend these spas claim to have knowledge of the dermatological therapeutic benefits/ properties of the thermal waters (78.4%) and only a small number of participants reported feeling some side effects (25.7%), referring mainly tiredness and drowsiness. The dermatological pathologies most commonly treated in both thermal spas were psoriasis and eczema. The spa treatment period of 14 days was the most frequent (94.6%) and the thermal treatment most frequently used was the immersion bath (49.3%). The improvements with the treatment that the individuals most valued were the

reduction of erythema (27.8%), flaking (25.6%) and pruritus (25.6%).

In the section aimed at evaluating the use of cosmetics containing thermal water, it was verified that 34 participants (45.9%) didn't use any products, 23 participants (31.1%) used cosmetics containing thermal water, and 17 participants (23.0%) doesn't know if they use them. The most commonly used forms were creams, lotions, soaps and gels. All users of cosmetics containing thermal water pointed out improvements with the use of these thermal products (Table 1).

Table 1. Perceived improvements with the use of thermal cosmetics.

Level of improvement	Values	More frequent improvements
Some (3/4)	69.6% (n=16)	+ comfort + hydration
Much (4/4)	30,4% (n=7)	- erythema - irritation - pruritus

## Conclusions

This study represents an important effort to evaluate the thermal impact on individual's perception of the support and treatment of dermatological diseases. The thermal spas users claim to have knowledge regarding the use of the thermal waters and notice the benefits throughout the dermatological therapy, referring few side effects. The use of cosmetic products containing thermal water is still not very frequent, but those patients that use these products refer to feel further improvements in the different skin conditions. The incorporation of the thermal waters into cosmetic formulations may be of extreme importance for the maintenance, correction and treatment of certain disorders/skin conditions.