

# Dermatoses and crenotherapy: historie facts in termas do Cró

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**Introduction & objectives:** Crenotherapy is the use of natural mineral water, peloids and gases, through bathing, drinking or inhalation, for medical purposes. Although it is not used in all countries, it is recognized by the World Health Organisation and it has been a well-established practice in many European countries, especially for the treatment of dermatoses and musculoskeletal, respiratory and otorhinolaryngology pathologies. In Portugal, there are more than 30 thermal spas currently working. The Beira Interior region has a long past in the treatment of chronic dermatoses, namely, the Cró and Monfortinho thermal spas. We intend to focus the history of Cró thermal spa, also globally highlighting the properties of thermal water in the Beira Interior region with usefulness in dermatology. **Material & Methods:** We have conducted a systematic literature review, using the model described by Haynes, with the keywords “balneology”, “history”, “Portugal”, “skin” and “skin diseases”, including publications in Portuguese and English, without temporal limit, and we have also considered information from relevant websites related to the topic. **Results:** The use of the medicinal water of Cró dates back to the Roman era proven by the discovery of 25 coins when the thermal spa was opened. The earliest reference to Cró belongs to Dr. Francisco Henriques, in 1726, who was contemporary with John V of Portugal and the King’s doctor. He described the remarkable curative effects of the water in Cró. There are some theories associated with the name “Cró” given to this thermal spa. One of the theories advocates that the origin derives from the French word “creux” that means, cave or excavated in the rock. The other two theories are related to the water: one of them holds that the word can mean “excavated by the waters”, while the other theory states that “Cró” could be related to a “clayey soil” since the water release sulphur when it evaporates. The water is sulphurous, weakly mineralized, bicarbonate and sodic and it is used through external administration techniques, to get the benefit of hydrodynamics and hydrothermal factors. Its sulphurous properties explain an important part of its benefit in dermatology because they have immunosuppressive, queratoplastic and antipruritic effects and, then, they have been highlighted as useful in pruritus without dermatosis and in many chronic dermatoses, namely,

lichen planus, psoriasis, chronic eczema and acne. In the latter, it could be useful after controlling the inflammatory lesions with conventional treatment and as a preventive therapy for relapses due to the antibacterial and keratolytic effect. All the thermal spas in Beira Interior region of Portugal are sulphurous, with the exception of Monfortinho thermal spa, but this also has a longstanding tradition in dermatology, with clinically significant benefits in psoriasis due to the high content of silica of its natural mineral water.

**Conclusions:** Although the psychological dimension with potential therapeutic benefit linked with thermal spas should not be forgotten, the thermal water in Cró and Monfortinho, in Portugal, has chemical properties which may contribute to the long history linked with the improvement of chronic pruritus and chronic dermatoses. Furthermore, besides those above mentioned, there are at least six thermal spas, with sulphurous water, especially in the Beira Interior region, deserving future analysis.