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# Poster 21. RHEUMATOID ARTHRITIS AND CRENOTHERAPY - PRELIMINARY RESULTS

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### Introduction

Rheumatoid arthritis (RA) is a chronic systemic autoimmune disease characterized by persistent inflammation of synovial joints with pain, often leading to joint destruction and disability. Balneotherapy is used a very long time ago and is recognized as an important tool for treatment of rheumatologic diseases.

Among the Portuguese sulphur mineral waters, the hydromineral occurrence of Caldas de São Jorge is a chloride-rich water with sodium prevailing in the cation composition. In spite of its major chemistry, therapeutic benefits of this water are probably related to the presence of reduced chemical species, such as HS- and H2S, the former being dominating in the pH conditions.

## **Objective**

The aim of the actual study is to evaluate the effects of sulphur water in rheumatoid arthritis patients in complement of their pharmacological treatment.

#### **Material and Methods**

This prospective randomized controlled study included 43 patients (20 were eliminated for different reasons, namely during a formation and some losers during the study). All of them are from the Center Hospital of Porto- Santo António Hospital. After randomization, 19 participated in thermal group and 24 only in control group. The selection obey to specific inclusion and exclusion criteria, and after ethics committee approbation and informed consent of patients. Their evaluation was made at day 0 (D0) first day of thermal treatment, day 21 (D21) last day of thermal treatment and after 3 months (M3), according to number of pain and swollen joints (CDAI), DAS 28, morning stiffness, analyses, echography (same joints in the same patient and along the time by the same echographist), visual analogue scale (VAS) for pain, fatigue, quality of life (QoL), appreciation of medical doctor, and finally the health assessment questionnaire (HAQ), always at the same periods of the follow-up (D0, D21 and M3) and simultaneously for the two groups. The thermal group had a special mini-bus to go and return from spa thermal (S. Jorge Spa) about twenty minutes from Porto. Those who work continue their journey in labor activity. Every day, a medical hydrologist was present in thermal treatments. These treatments were always the same: different types of baths predefined.

# Results

Of the preliminary results we emphasize a better statistically difference between groups, at D0 and M3, in delta CDAI (p<0,0001), delta EVA QoL (p<0,014) and delta HAQ (p<0,012) among all the variables studed.

### **Discussion and Conclusions**

In a population whose pain(body and psychological) predominate, every complementary gain is beneficial, simultaneously contributing to reduce costs, namely corticotherapy and AINE, and not less important a much better quality of life

### **Announcer**

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