

THE INFLUENCE OF WEATHER CONDITIONS ON PERSONS WITH RHEUMATIC DISEASES

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Abstract

Introduction: International studies confirm the hypothesis that weather changes are correlated with changes in the intensity of pain in patients with rheumatic diseases (Guedj and Weinberger, 1990; Shutty et al., 1992; Hendler et al., 1995; Jamison et al., 1995; Aikman, 1997; Gorin et al., 1999; Timmermans et al., 2014). Few studies on this subject have been conducted in Romania (Teodoreanu, 2001; Boloșiu, 2009). The main objective of this study was to analyze the perception of the influence of various weather conditions on patients with rheumatic disease.

Material and method: This was a retrospective longitudinal study. The group of analyzed subjects came from two sources: patients treated in the S.C. Tușnad S.A. Complex from the Băile Tușnad balneoclimatic resort in the period October-December 2017, on the one hand, and patients treated in the clinical service of Balneology at the Clinical Rehabilitation Hospital in Cluj-Napoca, in the period April 2017 – March 2018, on the other hand. The analysis was performed in a group of 106 persons, of which 66.0% women, 34.0% men, aged between 45 and 85 years (mean age 66.3 years). Only patients residing in Bucharest, Cluj-Napoca, Constanța, Iași and Timișoara were selected. All patients were diagnosed with degenerative rheumatic diseases including primary coxarthrosis, primary gonarthrosis, cervical-dorsal-lumbar spondylarthrosis, omarthrosis, cervical and/or lumbar discopathy, status post hip and/or knee arthroplasty after advanced coxarthrosis and gonarthrosis. The patients had associated arterial hypertension, ischemic heart disease, diabetes mellitus. The subjects were evaluated by means of a questionnaire, specially designed for this purpose. Two inquiry methods were used: the questions were asked individually on the day of the patients' arrival in the spa resort or within two-three days of hospitalization. In the case of patients from Tușnad, in order to study the adjustment of the body, the subjects were also inquired by phone immediately after the completion of treatment.

Results: The most notable results are the following: 54.7% of subjects definitely believe that their rheumatic pain is influenced by weather, and 27.4% of patients believe that their rheumatic pain is to a large extent influenced by weather. Most of the patients report that their rheumatic pain intensifies (becomes unbearable) when: temperature suddenly decreases (85.1%), moisture suddenly increases (78.2%), fog is present (59.8%), cloud cover suddenly increases (78.2%), there is torrential rain and/or storm (53.5%), there is frontal rain (46.0%), there is high wind speed (44.8%). The majority of the patients show the phenomenon of metotropism – 59.6% of patients report feeling more intense pain whenever the weather changes; most of the subjects (57.5%) report feeling changes in the weather 24 hours before, and 31.3% of subjects react 72 hours before the weather changes, which coincides with air mass changes in the upper layers of the troposphere. Regarding the adjustment of the body in the Băile Tușnad balneoclimatic resort, 41.7% of patients reported an improvement of their general health status, and 33.3% of subjects noted a worsening of their general health status within 3-4 days of their arrival in the spa resort.

Conclusions: The majority of the assessed patients consider that weather influences the intensity of their rheumatic pain, but sudden weather changes have a higher impact on pain intensity.