

DEVELOPMENT OF BALNEOLOGY IN TRANSYLVANIA - CENTRAL REGION

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Abstract

Introduction. In Transylvania (central region of Romania), there are spa resorts rich in natural therapeutic resources: mineral waters, mofettes, peloids, air, climate, forests. These are used in many pathologies: cardiovascular, gynecological, neurological, rheumatic, respiratory, digestive, renal, endocrine diseases. Methods: baths, aerosols, mud baths, mud packs, crenotherapy, thermotherapy, massotherapy, hydrokinesiotherapy, climatotherapy.

Material and methods. An analysis of the results of clinical and experimental studies, educational programs, projects conducted in some balneological centers in Transylvania. The studies were performed on natural therapeutic factors, i.e. carbonated mineral waters, mofettes, bioclimate, over the past five years.

Results and discussions. The results of a study in Băile Tușnad, aimed at evidencing the biological effects of mineral water in experimentally induced alcoholic liver disease, showed following biochemical tests and electron microscopic analysis that the mineral water from spring no. 3 has hepatoprotective properties. Also, studies regarding the effect of carbonated mineral water from spring no. 7 in Băile Tușnad and natural mofette on the balance of oxidative stress/ antioxidant parameters in plasma, associated with experimental myocardial ischemia in rats, highlighted the positive effects of carbonated mineral water and mofette, through a reduction of oxidative stress, as well as a significant change in the tested antioxidant molecules and significant histological changes. The results of clinical studies using natural therapeutic factors, carbonated mineral water baths, mofette and aerotherapy alongside kinesiotherapy in patients after stroke, Parkinson's disease, chronic arterial occlusive disease influenced the clinical and functional picture, determining a significant improvement of walking, functionality and quality of life. Human bioclimatology studies regarding the perception and influence of meteorological conditions on rheumatic pain in Romania showed that the meteorological factors that most influence the increase of pain in the joints are: low atmospheric pressure, low temperature and high humidity. Our results indicate that most of the patients (31.91%) could predict a change in weather three days in advance, 31.34% felt more intense pain one day before and during the first part of the day when the weather change was recorded, which coincided with a change in the air mass of the upper layers of the troposphere.

Conclusion. This Transylvanian balneological ecosystem, through the abundance, quality and diversity of its natural mineral-medicinal springs, with extremely useful and beneficial therapeutic effects, should be used to its full potential.