

## **PRESENTATION OF THE MEDICINAL CURING POSSIBILITIES OF THE HUNGAROSPA HAJDÚSZOBOSZLÓI ZRT.**

The basics of our medicinal possibilities, it is our treasure, the curing water.

Our medicinal water is proved scientifically to be a qualified medicinal water having a rather high content of minerals, sodium-chloride, hydrogen-carbonated features, and the bromide and iodide contents result in such physical, chemical and biological effects based on which and according to the performed medical examinations and the multi-decade experience it is indicated in the form of medicinal bath cure for the following situations:

- Chronic joint inflammation (RA, Arthritis urica, Arthropathia psoriatica)
- Degenerative joint deformations (Arthrosis)
- Various degenerative chronic inflammatory diseases of the spine (SPA, SNSA, Spondylarthrosis)
- Post-therapy of the Heine- Medin disease, or in case of paralysis due to cerebral haemorrhage, brain surgery or other causes
- Fibromyalgia, chronic muscle pains
- Injuries, sport injuries – post-therapy
- Supporting the callus forming in case of lasting bone injuries that rae healing with difficulty
- Constriction of the arteries
- Chronic gynaecological and urinal diseases
- Infertility (either due to an inflammatory disease or caused by the non-development of the uterus or ovary)
- Chronic skin diseases (psoriasis, eczema)

The balneo-therapeutic treatments can exert their effect during a cure only. The healing effect takes place based on a complex mechanism where physical, chemical, reflex and humoral effects play roles. At the beginning of the cure a rheumatologist-physiotherapist doctor performs an examination, the patients receive the therapies at intervals and in quantities prescribed by the doctor. During the cure every week and in the end there is a control examination.

The therapy with the medicinal water is effective by itself but the environment, the micro-climate, the change of the ambiance are factors that contribute to the success of the bathing cure. Nowadays they are focussing on the complex physiotherapeutic treatment meaning that the bathing cure is complemented with other procedures (physiotherapy, massage, mud therapy, weight-bath, carbonated bath, light therapy, magneto-therapy, ultra-sound and electro-therapy).

The balneotherapy may play preventive roles, too, in avoiding some diseases, meaning for example the arteriosclerosis which is considered an epidemic. When examining the mineral water of Hajdúszoboszló we realised that the cure is

decreasing significantly the CRP level of the serum and it is increasing the TAS level. (3)

The batching cure is contraindicated in case of decompensated heart disease, angina pectoris with stenocardia at rest, contagious diseases, incontinence urinae et alvi, feverish condition, malignant tumours.

The hypertonia is contraindicated in case of malignant, non-treatable format only, the complication-free hypertonia is rather improving due to the benefiting cure, and in case of the carbonated bath there are other positive effects, too.

Our studies proved that in case of patients with hypertonia and obese diabetes the balneotherapy does not cause any pathological change of the inflammatory, metabolic and antioxidant parameters. The result of the examination proves that the balneotherapy is not contraindicated for patients with hypertonia and obesity. (1)

Our medicinal waters are characterised by containing elementary iodine and iodide whose absorption takes place through the respiratory system and the skin. The iodine is increasing the solubility of the proteins and it is increasing the permeability of the arteries, the peripheral circulation, it has anti-inflammatory effects. It is improving the functioning of the ovary and it is decreasing the level of urine acid by increasing the urination.

The water contains sodium-chloride, too, it is a salty spa. Due to it the skin temperature is increasing, the surface arteries are dilating, the local metabolism is improving, the tone of the skeletal muscles is decreasing. It has anti-inflammatory effect, so it can be applied beneficially for treating inflammations. It exerts keratolytic effect, it is sensitising the skin against the ultra-violet radiation, thus it exerts rather good effects in case of skin-related diseases (psoriasis, seborrhoea).

During the past years we performed several double-blind controlled examinations during which we could realise that our waters are good for patients with knee-arthrosis, hip-arthrosis and waist pains. During each examination we saw that after the cure the patients complained significantly less, their life quality improved, they decreased their drug consumption and this improving remained even at the follow-up after 3 months.

We are also specialists in the cure of the spine within which we often apply the weight-based therapy which considered typically Hungarian. Our studies proved that the weight-based cures results in lasting improving when treating patients with neck and loins (discopathia) problems. (2,4)

The other speciality consists of our medicinal mud. We can use our, qualified mud successfully for the degenerative deformations of locomotion organs.

The English research publications that appeared in the past years:

1. The effect of balneotherapy on antioxidant, inflammatory, and metabolic indices in patients with cardiovascular risk factors (hypertension and obesity)—A randomised, controlled, follow-up study

Mihály Oláh<sup>a</sup>, Ágnes Koncz<sup>d</sup>, Judit Fehér<sup>a</sup>, Judit Kálmánczhey<sup>a</sup>, Csaba Oláh<sup>b</sup>, György Nagy<sup>c</sup> and Tamás Bender<sup>c, \*</sup>  
Contemporary Clinical Trials <http://dx.doi.org/10.1016/j.cct.2011.06.003>

2. The effect of infrared laser therapy and weightbath traction hydrotherapy in disorders of the lumbar spine: a controlled pilot study with follow up

Csaba Oláh, Mihály Oláh, Béla Demeter, Zoltán Jancsó, Valéria Páll, Tamás Bender  
*Biomechanica Hungarica III. 1. 174-183.*

3. The effect of balneotherapy on C-reactive protein, serum cholesterol, triglyceride, total antioxidant status and HSP-60 levels

Mihály Oláh, Ágnes Koncz, Judit Fehér, Judit Kálmánczhey, Csaba Oláh, Tamás Bender

International Journal of Biometeorology, 2010, Volume 54, Number 3, Pages 249-254

4. The effect of weightbath traction hydrotherapy as a component of complex physical therapy in disorders of the cervical and lumbar spine: a controlled pilot study with follow-up

Oláh M., Molnár L., Dobai J., Oláh Cs., Fehér J., Bender T.  
Rheumatology Int., 2008;28:749-56. IF:1,07