
BALNEOTHERAPY IN GYNÆCOLOGY

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History of balneogynæcology in Hungary

The first balneological society in Hungary was founded in 1889 by a prominent gynæcologist, Professor W. Tauffer who, by profession was the director of the Department of Obstetrics and Gynæcology of the Budapest University. This shows that treating gynæcological diseases with spa waters was an early recognition in Hungary. However, the first hospital departments based on thermal spa water treatments for gynæcological patients were founded only in the mid fifties of the past century starting with Parádfürdő in 1954 followed by Harkány in 1957.

Since then, numerous clinical experiences accumulated in gynæcological application of balneotherapy. The beneficial effect of spa waters is greatly dependent on their mineral content and thermal characteristics.

Balneo-physiotherapy for gynæcological diseases by spa water

In clinical terms, chronic pelvic inflammations and adhaesions, infertility (primary or secondary), chronic pelvic pain syndromes, endometriosis and perimenopausal disorders are targets of balneo-physiotherapy in gynæcology.

Chronic pelvic inflammatory diseases, regardless of its origin, or endometriosis, moreover previous intra-abdominal operative and postoperative complications with consequent adhaesions can all result in infertility, patent tubes, ovarian insufficiency by hypo-perfusion, hypoxia and malfunction of pelvic organs [1]. Chronic pelvic pain with dyspareunial complaints may not only be a consequence of chronic contracture of intrapelvic muscles but also a reason for fruitless marriages.

The complex goal of gynæcological balneo- and physiotherapy is a reparation of pelvic microcirculation, thus enabling the lysis of scar tissues and cicatrices, relaxation of contracted muscles in the small pelvis and pelvic floor. By a better microcirculation and vascularisation the soluble and cellular components of the immunsystem may better reach their targets and exert an effect resulting in mobilization and recovery of pelvic organs. This itself, together with proven anti-inflammatory effects (decreased release of Th1 type cytokines and inhibition of GM-CSF cell activation

and TNF-alpha, etc.) can also enhance the effects of other physiotherapeutical tools in a synergic way [2].

The effects of the Harkány thermal sulphurous spa water applied in tube-baths for women are further enhanced with thermal water diluted mud-packages around the pelvis in a form of “mud-shorts”. Hence the mud contains partly decomposed water-plants (Hévíz lake) and phyto-estrogens local circulation and menopausal symptoms are to benefit from this latter. These are supplemented with low abdominal and columnal massage using the physical and reflexological advantages and also repair lymphatic circulation. In order to help to repair the function of intra-pelvic and pelvic floor muscle structures intim-gymnastics is also a standard part of our therapeutical procedure. The climate and dietary concepts are additional tools in women’s rehabilitation [3].

The analysed data of an earlier follow-up study revealed a remarkable effectiveness of gynæcological balneo-physiotherapy. In 241 cases of primary infertility 39.7 %, in secondary forms 79.8 % of 186 cases got pregnant within one year after the spa cure [1]. In other gynæcological disorders including chronic pelvic inflammatory diseases, adhaesions, endometriosis, parametropathia spastica, perimenopausal disorders, etc. the overall evaluation in Visual Analog Scores recently showed a mean of 6.8 score improvement on a 10 score scale after a 14-23 days long cure.

Contra-indications of balneotherapy exist also in gynæcology : pregnancy, acute and chronic infectious diseases, malignant tumors, severe heart and circulatory diseases (severe coronary, artery diseases, heart attack, severe hypertension).

Balneo-physiotherapy for gynæcological diseases in Harkány by sulphurous spa water

The famous spa of Harkány is located in the southern region of Hungary, 25 kms from Pécs at the southern foot of the sunny Villány Mountain which is laying in East-West direction thus protecting the small bath-town from the northern winds. The average annual temperature is 10.9°C (approx. 52° Fahrenheit), while the quantity of the precipitation is on average 707 mm. The average duration of sunny hours per year is 1970 hours.

The thermal water was discovered in 1823, and is gained from three wells today. The temperature of the water is 61.7°C (approx. 143° Fahrenheit). The most specific characteristic feature of this spa water is its sulphuric content – with 1 mg/l sulphur content it is classified into the middle class sulphuric thermal waters. Sulphid, hydrogensulphid, thio-sulphate anions and mostly carbonil-sulphid (COS) constitute its biologically active sulphuric components.

The biological effects of the Harkány spa water, out of other thermal, hydrological and biophysical specificities are greatly in association with its sulphuric content : this, on the basis of dissolved other minerals, is called a sulphide sulphuric therapeutic water. Its fluoride and metasilicic acid content is significant, too. The

predominant carbonil-sulphid content of this water adsorbed through either the skin surface or the respiratory mucous membranes exerts its biological effects in many ways : either by incorporating in different connective tissues, scars, cicatrices, cartillages in joints, or in cellular level, providing an essential part of most enzymes in mitochondria, providing an anti-oxidant effect or being a part of some essential sulphur-containing amino acids (cystein, methionin). Thus, for long decades, special cures use it for rheumatic, orthopedic or other locomotor disorders and rehabilitation. Lately, dermatological experiences showed spectacular remissions in psoriatic diseases.

Also based on the biological effects of carbonil-sulphid and hydrogen-sulphid content of Harkany spa, a more than 3 decades' experience with gynæcological patients have been analyzed [4]. These, together with documented investigations data, let us say that its effects on internal scars, adhaesions, mounted connective tissues within the pelvis, chronic pelvic inflammatory diseases (PIDs), all kinds of damaged microcirculation of tissues leading to malfunctioning of pelvic organs including ovaries, tubes, uterus, bladder or vaginal wall.

In harmony with its all profile, the hospital is equipped with special wards of diagnostics (X-ray examination, laboratories, ultrasound) and therapies (thermal pool-bath and tub-bath, mud packing, weight-bath, different electrotherapies, therapeutic exercises/gymnastics, massage, underwater massage). The hospital provides complete treatment with full range of services and hospitalization demands, as well as out-patient care with complete medical examination and necessary treatments. In case of foreign patients, the hospital provides accommodation : rooms with double bed, bathroom and sun-balcony. According to the personal needs, the hospital can also provide bed-and-breakfast or full board accommodation during the medical treatment.

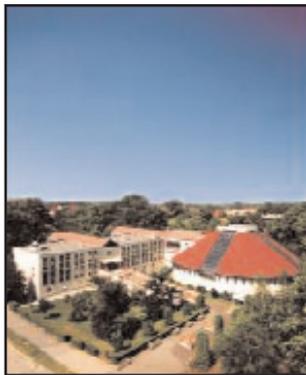


Figure 1. The balneo-physiological unit of the Harkány Rehabilitation Hospital

A few words about Parádfürdő

The Parádfürdő Rehabilitation Hospital is one of the best known rehabilitation hospitals in Hungary. The hospital is lying in the Mátra mountains 290 meters above sea level, in scenic environment surrounded by forests, 120 kms far from Budapest. The climate of the windless valley is balanced and its climate is mild.

In the near of Parád in the thick of the forest are founded a lot of streams also springs and wells which are well-known since centuries about its curative effect. The first description of medicinal waters in Parád by Bél Mátyás dates back to 1730 and later Kitaibel Pál, a scientist well-known all over Europe, conducted an exact analysis of the medicinal waters.

The hospital was established at the beginning of the 20th century based on the alum-containing ferrous thermal water. In the previous bath-center was used the original method : the water was boiled in a pot and was run to the bath-boxroom through on a trough. Today's the hospital-life is more comfortable, but the old park cherishes the memory of the pre-war spirit.

These days, with high skilled personal, help by using modern instruments and procedure and the special thermal water to the recovery of the gynæcological and gastroenterological rehabilitation patients.

To the gynæcological balneotherapy using thermal water is produced artificially in controlled conditions by washing the alum-rock. The patients become the treatment in a 20 minutes bathing in the bath, three times in a day in 38°C thermal water. The patients get also a Hévíz mud-cure, massage and a gymnastic program. By the current treatment the patients take part on a group consultation three times in a week. The walking in the forest and the diet are also parts of the treatment. In the hospital is available the library, internet connection – also lying in the bed – two bedroom apartments, hairstyling and cosmetology which serve the good mood of the patients.



Figure 2. The Parádfürdő Rehabilitation Hospital

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