

State of the art in Serbia Health Resort Medicine

Nikola SREMČEVIĆ⁽¹⁾, Aleksandar JOKIĆ⁽¹⁾

⁽¹⁾Specialized Rehabilitation Hospital Banja Koviljača,
15316 Banja Koviljača (Serbia)
jokic71@gmail.com

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Abstract

Serbia has 300 healing water wells, with 1500 L/sec, but only 3-5% are exploited. There are 24 active rehabilitation centers in Serbian health resorts, where balneoclimatological treatment is exercised. Each of those health resorts is known for the treatment of certain conditions. Patients with orthopaedic, neurological, rheumatological, dermatological, cardiovascular, respiratory, gastrointestinal, metabolic problems are mainly treated, as well as children.

Balneoclimatology is studied at Medical School in Belgrade, as one-year subspecialization at the Cathedra for Balneoclimatology. Nevertheless, there is a lack of scientific studies that would confirm or disaffirm experience of physicians in the application of balneotherapy.

We have made a significant number of scientific research and made several discoveries regarding the positive effects of treatment that utilizes peloid and sulphuric water, which jointly confirmed that balneotherapy aides in a wide range of disorders.

Serbia has a long balneological tradition, but it needs educated specialists in balneoclimatology who will, with the help from International Society of Medical Hydrology and Climatology (ISMH) experts, confirm the healing properties of natural factors, and persuade relevant institutions in the State that balneoclimatology has a significant place in the treatment of patients and that it should be applied as much as possible, primarily because it is a form of natural treatment, and has no significant side effects.

Key words: Balneology, Spa, Research, Health Resort, Sulphuric Water, Peloid

Estado del arte en Serbia de la Medicina Termal

Resumen

Serbia cuenta con 300 manantiales de agua mineromedicinales, con 1500 L/s, pero sólo el 3-5 % son explotadas. Hay 24 centros de rehabilitación activos en centros termales Serbios, donde se ejercen tratamientos balneoclimáticos. De cada uno de esos centros termales se conocen el tratamiento para ciertas indicaciones. Los pacientes con problemas ortopédicos,

neurológicos, reumatológicos, dermatológicos, cardiovasculares, respiratorios, problemas gastrointestinales, metabólicos son los tratados principalmente, así como a los niños.

La Balneoclimatología se estudia en la Facultad de Medicina de Belgrado, como subespecialización de un año en la Cátedra de Balneoclimatología. Sin embargo, hay una falta de estudios científicos que confirmen o nieguen la experiencia de los médicos en la aplicación de la balneoterapia.

Hemos realizado un número importante de investigaciones científicas y varios descubrimientos sobre los efectos positivos del tratamiento de peloides y aguas sulfuradas, que en conjunto confirman la ayuda coadyuvante de la balneoterapia en una amplia gama de trastornos.

Serbia tiene una amplia tradición balneológica, pero necesita especialistas formados en balneoclimatología que, con la ayuda de expertos de la Sociedad Internacional de Hidrología Médica (ISMH), confirmen las propiedades curativas de los factores naturales y persuadir a las instituciones competentes del Estado de que la balneoclimatología tiene un lugar significativo en el tratamiento de los pacientes y que debe ser aplicada tanto como sea posible, sobre todo porque es una forma de tratamiento natural, y no tiene efectos secundarios significativos.

Palabras clave: Cura Balnearia, Balneario, Investigación, Medicina Termal, Agua Sulfurada, Peloide

REFERENCE STANDARD

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INTRODUCTION

Serbia has had a long tradition of thermo-mineral water and peloid treatment, dating back from the Romans. Today, Serbia has 300 healing water wells, with 1500 l/sec of healing water going away without return¹. According to the official data, only 3-5 % has been exploited.

Rehabilitation centers that combine balneotherapy with physical and rehabilitation medicine were mainly established within health resorts. Unfortunately, in our country, as well as throughout Europe, these centers have been neglected for years, due to domination of pharmaceutical industry over balneotherapy, and due to carelessness of the State.

Currently, there are 24 active Specialized Hospitals within Serbian spas, two of them being private property, and the rest being the property of the State. Per year, there are approximately 43,000 inpatients and approximately 40,000 outpatients treated in Serbian health resorts at the expense of the State. Last year, the State spent about 30 million euros for the treatment of patients in the Serbian health resorts. There are much more inpatients and outpatients that are treated at their own

expense. Patients with orthopedic, neurological, rheumatological, dermatological, cardiovascular, respiratory, gastrointestinal, metabolic problems were mostly treated, as well as children.

Various health resorts specialize in treating various pathological conditions. Therefore, patients with respiratory issues are mostly treated in Sokobanja health resort, while Vrnjacka Banja is well known for the treatment of diabetics and other gastrointestinal problems. Whereas Gamzigradska Banja treats patients with vascular problems, Ivanjica is a widely known center for anemia, and Gornja Trepcja for multiple sclerosis. In addition, Niska Banja is well known for rehabilitation of patients with cardiovascular problems, and Bogutovacka Banja for the treatment of sterility. While both Banja Kanjiza and Banja Koviljaca treat rheumatological, orthopedic and neurological patients, Koviljaca also has a children's ward, etc.

Serbia is also rich in numerous table mineral waters, some of them being Karadjordje, Prolom, Minaqua, and the most significant is Mivela which contains 330 mg/l of Magnesium². Nevertheless, there is a lack of scientific studies that would confirm or disaffirm this experience.

Within the schooling system, after six years of graduate studies at Medical School, students go in for four-year specialization in Physical and Rehabilitation Medicine (PRM) or internal medicine. After that, one-year sub-specialization in balneoclimatology can be enrolled³. Balneoclimatology is partially studied during graduate studies at Medical School, in the fifth year, then during specialization and mostly during sub-specialization at Cathedra for Balneoclimatology of Belgrade Medical School.

Today, in Serbia, there are 21 graduated specialists in balneoclimatology. The question is whether we have enough professionals at Cathedras at Medical Schools, and in health resorts. If we did, there would be more scientific papers from Serbia at medical congresses and in journals, which would confirm healing properties of natural factors Serbia abounds in.

There is a prevailing attitude in Serbia that only specialists in PRM should exercise balneology, and there are views that it is enough to spend up to three days in health resort to achieve the expected balneotherapy effect. More and more, the term of Spa Wellness is being mistaken for the notion of treatment using balneotherapy.

METHODS

However, not all is that bad. Young specialists in balneoclimatology that have been educated at the Cathedra for Balneoclimatology are eager to acquire new knowledge and experience and wish to engage in world trends. First breakthrough was made by the physicians from Banja Koviljaca, at the Mediterranean congress of PRM in 2006, and it was then that the cooperation between Serbian professors and physicians and ISMH experts has started. We took active part in subsequent mee-

tings in Hungary and Turkey, as well as in two previous ISMH world congresses. It is no wonder why we have the greatest interest in promoting the significance of this branch of medicine.

In 2011, we had more than 10,000 inpatients, who spent 153,000 treatment days (on average 15 days per inpatient). Together with 6,000 outpatients, they brought Banja Koviljaca 6 million euros. Last year, more than 270,000 balneological procedures were performed. During the peak of the tourist season, more than 2,000 balneological procedures per day are performed in our institution (mud wraps, baths in bathtubs and pools, local baths and vaginal spraying), and about 3,500 of all physical procedures. Since we have had a tradition in balneotherapy for more than 150 years, and since we are open throughout the entire year, our experience in treating with sulphuric water and peloid is the greatest in Serbia.

Our three specialists in balneoclimatology, together with other specialists in PRM (total 20), two of whom are rheumatologists and four pediatric physiatrists, observe the effects of balneotherapy in children and adults every day. Our consultants, professors from the Belgrade Medical School help us with this. We have received the greatest help from Professor Dr. Zeki Karagulle, who analyzed our water and peloid in 2011.

RESULTS

We have scientifically proved the antioxidative effect of balneotherapy in patients with osteoarthritis¹⁻⁴⁻⁵⁻⁶ (OA). Furthermore, we have obtained scientific proof of chondrogenic effect of peloid⁷ in children with Morbus Perthes. We have also scientifically proved that low temperature sulphuric water and peloid may be applied in patients with active form of rheumatoid arthritis⁸ and that they have very good effect. The effects of water and mud on subjective and objective condition of patients with OA have been very well studied⁹⁻⁵. We were the first in Serbia to show the effects of balneotherapy on patients with osteoporosis¹⁰⁻¹¹, which was better than in patients who had other forms of physical treatment.

In Kanjiza, a health resort in Vojvodina, the northern Serbian province, superior effect of balneotherapy combined with underwater traction in patients with cervical and lumbar discus hernia has been proved¹², also in treatment of polyarthritis¹³. In Mladenovac, Selters health resort, favorable effect of balneotherapy in patients with rheumatoid arthritis in steady phase of the illness has been proved¹⁴.

CONCLUSION

There are probably more young and ambitious balneologists in Serbia, but they need support in their scientific paperwork, and in bringing their views out in the

world. Now, it is easier, because Serbia has its own representative in the ISMH Scientific Committee, and “Union Européenne des Médecins Spécialistes – European Union of Medical Specialists” (UEMS) permanent working group for balneology.

Additional confusion has been brought by the management of the Serbian Spa Association and the Minister of Tourism, who openly supported the attitude that all patients coming to health resorts at their own expenses (and they constitute the majority), actually do not come for the treatment, and thus they should be treated as tourists, not as patients. This is one of the reasons why the role of specialist in balneoclimatology is important, since they should persuade both the patients and the relevant institutions in Serbia that balneoclimatology is the oldest branch of medicine, known all over the world and that the effects on people's health are well known and widely acknowledged, that it can be used as a prevention, and that the major effect is the treatment of all the above mentioned pathological conditions.

Without scientific papers and help from ISMH, that struggle will be tough!

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