

The story of Splitske Toplice, Croatia (The Spa of Split)

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The aim of this paper was to outline the evolution of the Spa of Split, known since the Roman period and actively operating for the last 175 years. It was carried out a study of the literature and other documents and photographs pertaining to the institution, as well as interviews with its retired former employees. The Spa of Split has evolved from the private bath of a Roman emperor into an academic department, part of a medical centre and a Medical School. This evolution is a unique phenomenon in countries of Central Eastern Europe and its outcome has advantages for patients, education of future health workers and for rehabilitation professionals.

Key words: Physical Therapy Techniques - Balneology - Baths - History of medicine.

Similarly to other countries of Central Eastern Europe (CEE) medical rehabilitation in Croatia has 2 main origins, namely orthopaedics and balneotherapy.¹⁻³

Since the foundation of the first orthopaedic department in Europe (Switzerland 1780) the specialty assumed a rehabilitative approach: hospitals for children with physical disability in Munich in 1832, Stuttgart in 1860, Copenhagen in 1872,^{4, 5} Budapest in 1903¹ and Prague in 1913² provided education and vocational training in addition to surgical care. During the First World War physical and

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occupational therapy became important adjuncts in the treatment of orthopaedic military casualties.⁵ In 1908 the first department for orthopaedic surgery was established in Croatia, in Zagreb; from its beginnings the department was able to offer specialist diagnostic and therapeutic work-up including physiotherapy and provision of appliances.⁶ In 1914, when it started admitting war casualties, its founder (Božidar Spišić) stated that it was not enough to heal the injuries of the wounded but that one should aim to restore function of the afflicted limb⁷ and in 1915 an arrangement was found to provide also vocational rehabilitation in a nearby workshop.⁶ In 1961, within this department, but on another location, an institution for prosthetic rehabilitation of persons following amputation of limbs was opened and is today the only national referral centre for this impairment in the country.⁸

Like other countries in CEE,^{2, 3} Croatia has several spas with springs of mineral water and favourable climatic factors. To complement natural factors, some modalities of physical therapy began to be provided in spas, such as exercises and massage in pools and tubs, warmth and light therapy

Submitted for publication February 20, 2003.
Accepted June 19, 2003.

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and electrotherapeutic procedures^{9, 10} and in many spas some methods of rehabilitation were also added, mainly kinesitherapy. The Croatian word for Spa is "Toplice". There are 8 such "Toplice", some of them known from the Roman times; they flourished in the 19th century and gradually enlarged.¹¹ In the late 1950s inpatient departments (mainly for rheumatic conditions) were opened within their complexes. In the early 1960s the spas were given the name of "hospitals for rheumatology and rehabilitation" and began to care also for neurological patients. During the 1991-1995 war most of the former spas adapted their potential to the care of war casualties, gained confidence in their rehabilitation capability and have upgraded their activities. In one of the former spas (Varaždinske Toplice) a spinal cord injury centre and in another (Krapinske Toplice) a department for rehabilitation of traumatic brain injuries developed during the war, both entities being now the only such facilities in the country.⁸ In 1993, within a reform of the healthcare system they were named "special hospitals for medical rehabilitation", although only 35% of their beds were used for the purpose. All former spas remained free-standing, not part of medical centers and in fact are geographically distant from most of them. They are not engaged in medical education and their research activities are limited to clinical observation. Many of them have, within their complexes, hotels for accommodation of individuals seeking to benefit from balneotherapy and active rest.¹² One of the 8, Splitske Toplice (the Spa of Split) shows a different evolution and is the subject of this paper.

Development

Diocletian's bath

Gaius Aurelius Valerius Diocletian, the Roman emperor, built a palace on the site where the town of Split is located today, moved into it in 305 A.D. and spent there the last years of his life, dying in 319 A.D. The palace is built on the coast of an open bay, a few miles south from Salona, then the administrative centre of the province. The location was good for a royal palace: a mild Mediterranean climate, sheltered from the cold, northern winds by high mountains and supplied with water from the

spring of the river Jadro by a long aqueduct.¹³ Diocletian, allegedly suffering from a rheumatic condition, probably chose the location for the palace also because of the availability of numerous sulphurous water on the site.¹⁴ Springs were found in the underground portions of the southwestern part of the palace. There was a complex of small halls, some of them divided into niches, most probably connected to Diocletian's quarters in the western part of the palace. Springs were also found in the eastern part (discovered only in 1970), and these probably served guests of the emperor.¹⁵

Modern beginnings

In 1675 Jacques Spon, a French physician and archeologist, noted that the sulphurous waters of Split had remedial attributes, but emphasized that they were in use for laundry only.¹⁶ The remedial utilization of these waters began in 1817 when Nicola Seleban (a Swiss entrepreneur) was granted their commercial use. In 1821 the first bathing facility was erected not far from the palace and in 1823 Antonio Bianchetti (a chemist from Novara) made the first chemical analysis of the water. In 1836 a new bathing facility was erected and then enlarged, first in 1850 and then again in 1903.¹⁵ The spa had a visiting physician, available every day to oversee the execution of medical orders. Repeated analyses of the water confirmed their beneficial effect, and numerous diplomas and prizes were awarded to the water in international exhibitions,¹² particularly for containing more iodine than other mineral waters of Europe,¹⁶ and are proudly displayed on the premises of the Spa. In 1909 it was found that it also contained radioactivity.¹⁴ In the 1920's the spa was listed in the professional, balneological literature as "a mineral, sulphurous, radio, iodine and bromide spa".¹⁷ A promotion leaflet from 1924 claimed that indications for treatment with the water were inflammations of muscles and joints, chronic inflammations of veins, neuralgias, neurasthenia and hysteria, as well as skin diseases and low back pain.¹⁵

Later developments

In 1945 the facility was nationalized and its services included into the socialist healthcare system. In 1950, 1 340 ambulatory persons were treated in

the institution, mainly for rheumatic conditions. In 1957 a section with 100 beds was opened and cared for more than 1 000 inpatients annually, all bathing in the waters, and some also drinking it. Physiotherapists started to provide kinesitherapy and an occupational therapist initiated training for independent living. Since there was a shortage of rehabilitation therapists, nurses were taught to apply these modalities.^{18, 19} Between 1986 and 1990 the facility was again renovated, but the ground floor that contained facilities for bathing could not be refurbished because of lack of funds, due, partly to the fact that health authorities ceased to provide expenditure for care by natural factors. Consequently, the use of mineral water stopped and the spring was captioned. In 1993 Splitske Toplice ceased to be an independent institution and became the department for physical medicine, rehabilitation and rheumatology of the teaching hospital of the Faculty of Medicine, University of Split.²⁰

The present academic department

The department functions on 3 sites, the former health spa (with 70 beds for inpatient care and a busy outpatient department), and on the 2 complexes of the teaching hospital (providing consultation to other hospital departments as well as ambulatory care). The department has 13 physicians, specialists in physical medicine and rehabilitation, 4 of them also with postgraduate training in rheumatology. There are 63 physiotherapists, 25 nurses and 1 speech therapist; there is no occupational therapist, similarly to other rehabilitation institutions in Croatia⁸ and other countries of CEE.²¹

The department has responsibility for a 2-week's course of physical medicine and rehabilitation for medical undergraduates in their 5th year; the *curriculum* of this course is now being revised to change its emphasis from physical medicine to medical rehabilitation and the management of persons with disability in the community. The department has also responsibility for the 3-year programme of the High School of Physiotherapy, which is under the Faculty of Medicine. Scientific investigations are carried out, in cooperation with other departments of the hospital and the Faculty of Medicine.²²⁻²⁸

During the 1991-1995 war, the department admitted casualties from Southern Croatia and from

Bosnia and Herzegovina, and provided initial rehabilitation, including prosthetic rehabilitation of persons after amputation of lower limbs,^{29, 30} prior to transferring them for long-term rehabilitation to a special hospital for medical rehabilitation on the near-by island of Korčula.³¹

Discussion

The story of Splitske Toplice (the Spa of Split) illustrates again the development of physical medicine and rehabilitation from one of its origins in a spa. The special characteristic of this development in Split is that the spa evolved into an academic department, part of a Medical Centre and a Faculty of Medicine. This has several advantages. The department receives its inpatients, largely from other departments of the medical centre thereby making it possible to examine them prior to admission and to ascertain that those admitted are appropriate for a rehabilitation programme. Secondly, the department has access to all diagnostic and therapeutic facilities of the center. Thirdly, it actively collaborates with other sectors of the centre and the Medical School in research and education. Lastly, the awareness to the role of rehabilitation medicine among other specialties is raised. The disadvantage lies in the need of the department to compete with other sectors of the medical centre for resources.

Most of the other 7 former spas in the country also developed their rehabilitation potential, but are not functioning within a medical centre and still cater, partly, to individuals seeking to benefit from balneotherapy only and are interested in developing medical tourism.³² The 7 spas of Croatia, carrying the name of rehabilitation hospitals, will have to decide their future *i.e.* serving only for active relaxation, like all spas in the Czech Republic² or Slovakia,³³ become affiliated with medical centres and justify their names or remain a combination of active relaxation and a rehabilitation institution.

Conclusion

The evolution of the Spa of Split into an academic department for physical medicine and rehabilitation is a unique development of spas in Central Eastern Europe.

It is generally agreed that there is an increase of the needs for medical rehabilitation and a rising significance and prestige of the specialty. An academic department of rehabilitation, such as the one in Split, that is an integral part of a medical centre is better able to influence the solution of problems, the education of future health care professionals and the development of rehabilitation services in the community.

Riassunto

La storia di Splitske Toplice, Croatia. Il centro termale di Split.

Lo scopo di questo lavoro è di analizzare l'evoluzione di Splitske Toplice, il centro termale di Split, noto sin dal periodo romano e attivamente operante negli ultimi 175 anni. Lo studio è stato condotto sulla letteratura, sui documenti e sulle immagini riguardanti l'istituto. Inoltre sono state condotte alcune interviste a dipendenti ormai in pensione. Nel corso dei secoli il centro termale di Split, da bagni privati di un imperatore Romano, è diventato un dipartimento accademico attualmente parte di un centro medico e di una scuola di medicina. Questa esemplare evoluzione, unica nei paesi dell'Europa centro-orientale, porta con sé notevoli vantaggi per i pazienti, per l'educazione del futuro personale sanitario e per i professionisti della riabilitazione.

Parole chiave: Balneoterapia - Storia della medicina - Terapia fisica.

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