

### Treatment of the urinary tract diseases in the 16<sup>th</sup>-century work *Cieplice (Thermal Springs)* by Wojciech Oczko (1537-1599)



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#### ABSTRACT

The use of water for therapeutic purposes was not unknown in ancient times. It was largely the Methodic school of medicine that widely used the physical and chemical properties of water to treat various ailments. However, the end of the Roman balneotherapy came with the downfall of the Empire and was not revived until the Renaissance. In Poland, mineral water springs, both for drinking and therapeutic bathing, came to be known as early as the 13<sup>th</sup> century and gained in further popularity in the following years. With the discovery of new springs all around the country a number of scientific works on the properties of water and its application for treatment were published. One of them, *Thermal Springs*, was by Wojciech Oczko (1537-1599). Born in Warsaw, he started his education at the Krakow Academy and continued in Italy where in Bologna, he obtained the title of doctor of philosophy and medicine. Having returned to his native Poland in 1569 he worked as the court doctor of two Polish kings: Stephen Báthory and Sigismund III Vasa. In 1598 he moved to Lublin where he died in 1599. His work *Thermal Springs* was published in Krakow in 1578. In the 16<sup>th</sup> century Polish the noun *cieplice* denoted a hot medicinal spring as well as the town placed around it. The main stimulus to take up the subject of treatment with water came to Oczko from king Stephen Báthory himself who had ordered him to do so. However, a no small role was played by his own willingness to promote the method of treatment with which he had come in contact during his peregrination in Western Europe. The work includes the classification of waters to be found in Poland along with their medicinal application as the most efficient cure for numerous skin and internal organs diseases. The urinary system and its malfunctions were also given the author's consideration who recommends treatment with water in cases of renal and ureteral calculi as well as ureteral stricture or infections. Treatment with water can also soothe the pain in a gout attack and is helpful in cases of purulent drainage from the male sex organ. A part of the work is devoted to dealing with side effects of baths also concerning kidneys. Internal application of water can also be advisable in case of haematuria. *Thermal Springs* is by general consent regarded as the beginning of the Polish balneology and Wojciech Oczko is seen as its father.

**KEYWORDS:** Wojciech Oczko, balneology, urinary tract diseases

#### Introduction

It was in ancient times that water started to be used for therapeutic purposes. It was generally believed that apart from purely hygienic values water brought about health benefits, especially if twinned with a balanced diet and physical activity. All these combined were known to be advantageous for respiration and digestion. Moreover, they were supposed to soothe headaches and provide general relaxation. In ancient Greece and Rome water treatment was widely regarded as a key means of balancing the, so called, "humours" i.e. distinct bodily fluids. Both chemical and physical properties of water were harnessed to serve therapeutic purposes with the Methodic school of medicine being at the forefront of the practice. Those days, balneology was held in high esteem, hence, travel to relatively distant places with appropriate waters was far from rare. With time, however, the significance of this method of treatment began to wane and the fall of the Roman Empire put a sad end to Roman spas as well. The rebirth of interest in balneology

came with the Renaissance. Early Polish reference to springs of mineral water for drinking and curative baths, in Inowłódz upon the Pilica River, dates back to the 11<sup>th</sup> century AD. Two centuries on and three more sites come to light – Cieplice, Szczawno and Łądek in the Sudetes. The 15<sup>th</sup> century saw the discovery of more springs scattered around the whole country including those in Duszniki, Jedlina, Iwonicz, Szkło and Kudowa. At the time, a number of scientific dissertations investigating and describing the healing properties of these waters were published with that by Wojciech Oczko aka Ocellus (1537-1599) being at the cutting edge of the kind. Ocellus himself was a Polish doctor and researcher, a student of Polish and Italian medical universities and his *Thermal Springs*, published by Officina Lazari in Krakow in 1578, had a strong impact on the development of Polish medicine (1–6).

Ocellus was born in Warsaw, Poland in 1537 into a *middle class* family who had settled down there in the early 15<sup>th</sup>

century. His father, Stanisław, was a wheelwright and his mother, Zofia nee Koczan, was a daughter of the Mayor of a northern Polish town of Brodnica. Ocellus' early education started at a Cathedral school in Warsaw and in 1559, supported by diocese chapter, he went on to study at Krakow Academy where, in 1562, he received the title of a Bachelor. Having returned to Warsaw he paid off his debt to the diocese by teaching at the local college until 1565 when, again supported by the church hierarchy, he went to Italy to be trained as a medical doctor. He studied at universities in Padua and Bologna and, on 11 March 1568, he obtained a doctorate in philosophy and medicine. The Italian Renaissance was marked by a rapid development of medicine rendering the Apennine Peninsula a primary destination for the knowledge-hungry youth from all over Europe, including Poland. Italian universities were full of renowned lecturers who were the leading figures of the Renaissance. Most outstanding individuals occupying exposed positions in Poland were either graduates or employees of those academies. Ocellus' scientific peregrination also led him to Spain and France, where he visited Montpellier to become acquainted with the local school of medicine. On returning to his native Poland, he settled down in Warsaw in an apartment owned by the Holy Spirit Hospital. In 1571, he was obliged to treat poor patients at the hospital as well as the members of the diocese chapter. Independently, he ran a successful private medical practice winning a reputation also in the royal milieu. On 7 August 1576 Ocellus was appointed doctor and secretary to the King of Poland Stephen Báthory with annual remuneration amounting to 200 zlotys. Although he was not obliged to stay at the royal court at all times, being only summoned on special occasions, he remained in a very close relation with the king. At the time, the position of the permanent court doctor was held by Nicolas Bucella (de Bucellis) from Padua, an alumni of the local university.

It was probably in August 1582 when, due to health problems, Ocellus gave up the position of the royal doctor. However, following the death of Stephen Báthory and the crowning of Sigismund III Vasa, he returned to his royal service accompanying the king during his travels around the country. Next, he settled down in Warsaw to cater for his family and business. Ocellus was known for his philanthropic disposition e.g. giving farmland to the poor St. Cross hospital in Warsaw and allocating a substantial amount of money for rebuilding of the burnt-down Bernardine church and monastery in Lublin. It was in 1598 when he moved to Lublin and purchased a manor where soon afterwards, on 26 December 1599, he died and was buried in Bernardine church there.

Despite being married twice, to Elżbieta, (1574) daughter of Stanisław Sidlarz, the Mayor of Old Warsaw, and again (1595) to daughter of Andrzej Humięcki, the Mayor of Warsaw, Ocellus died childless. He was friends with the outstanding figures of his time including Jan Kochanowski, the great Polish poet. Ocellus' interest in humanities and literature led him to staging Kochanowski's drama *The Dismissal of the Grecian Envoys*. In recognition of his merits for the Polish medical culture, the Polish Association for the History of Medicine established in 1924 by the renowned Polish historian of medicine professor Adam Wrzosek, was named after Ocellus. Also, the diploma for developing and popularising the history of medicine, ethics and culture given by this Association bears the same name (Figure 1, Figure 2) (7- 10).



Figure 1 - Wojciech Oczko (Ocellus) as the Father of Polish Balneology.



Figure 2 - Wojciech Oczko's (Ocellus) monument in Bernardine church in Lublin, Poland.

Ocellus' two most famous publications are titled *Thermal Springs* and *Przymiot*. The latter one is a compendium of knowledge concerning the essence, diagnosis and treatment of the common illness of his time – syphilis. Undoubtedly, its scientific quality puts it on par with similar publications from Italy and France on the disease, which makes Ocellus a renowned, European-scale syphidologist. Some older-day historiographers and historians ascribe other works to Ocellus, which are, however, unknown. The information about them is included in the second, combined, edition of both works.

*Thermal Springs*, published in 1578 by Jan Januszewski at Officina Lazari in Krakow, was dedicated to the Castellan of Trakai and Vice Chancellor of the Great Duchy of Lithuania Ostafij Wołowicz. The book contains 99 pages, mostly printed in Gothic style. The body of the contents is written on 78 pages with double pagination. In the 16<sup>th</sup> century Polish the noun *cieplice* denoted a hot medicinal spring as well as the town placed around it. The main stimulus to take up the subject of treatment with water came to Ocellus from king Stephen Báthory himself who had ordered him to investigate the springs of Jaworowo. However, a no small role was played by his own willingness to promote the method of treatment with which he had come in contact during his

peregrination in Western Europe. *Thermal Springs* includes a lot of information on overseas spas combined with the presentation of a few Polish sites e.g. salt mines in Bochnia and Wieliczka, sulphurous waters in Grodek and Swoszowice and a mineral water spring in Jaworowo. The work includes the classification of waters to be found in Poland along with their medicinal application as the most efficient cure for numerous skin and internal organs diseases. The author, however, warns against the use of water which is too hot believing that warm water is best for health and it is not deprived of its medicinal qualities. Prior to the application of water treatment, Ocellus recommends examination of the general condition of a patient. What is more, according to him, one should not stop treatment too early immediately after the first symptoms of recovery appear nor when there is no positive outcome of the therapy. Ocellus also draws the reader's attention to possible side effects. His general recommendation is to use waters both externally in the form of baths and compresses and internally. Some of his observations are in line with modern balneology. The ailments of internal organs that can be treated with hot waters, especially through internal application, include diseases of the digestive tract, the respiratory system and others. The urinary system and its malfunctions were also given the author's consideration who recommends treatment with water in cases of renal and ureteral calculi as well as ureteral stricture or infections. His observations are on the borderline between the modern urology and nephrology. Internal application of water can also be advisable in case of haematuria and nephritis. What is interesting, Ocellus was not oblivious to the problem of the ratio of the water taken in to the amount of urine, which, by modern means, might be interpreted as the crucial water balance. Treatment with water can also soothe the pain in a gout attack and is helpful in cases of purulent drainage from the male sex organ in course of syphilis. A part of the work is devoted to curing side effects of baths, also those affecting the kidneys. *Thermal Springs* is by general consent regarded as the beginning of the Polish balneology and Ocellus is seen as its father (Figure 3, Figure 4) (11- 13).

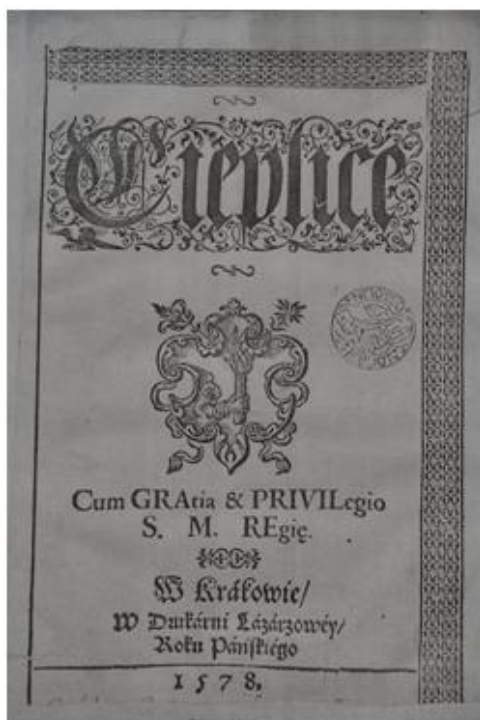


Figure 3 - The title page of *Cieplice* by Ocellus from 1578 (Courtesy of Dolnośląska Biblioteka Cyfrowa).

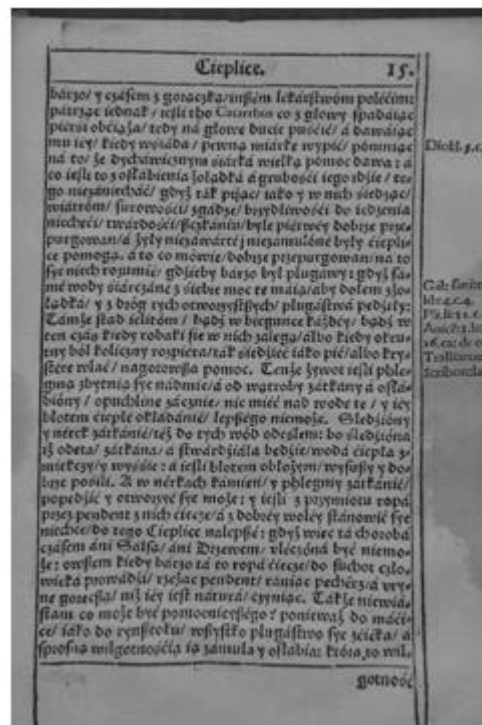


Figure 4 - A copy of a page from *Thermal Springs*. (Courtesy of Dolnośląska Biblioteka Cyfrowa).

The work was republished in Warsaw in 1881 by the Warsaw Doctors' Society to commemorate 300<sup>th</sup> anniversary of the original publication. The reprint coincided with the 50<sup>th</sup> anniversary of medical practice of Józef Majer, the professor of the extension of the Jagiellonian University in Krakow, the honorary member of the Warsaw Doctors' Society and the President of the Academy of Skills in Krakow (Figure 5).



Figure 5 - The title page of republished works by Ocellus *Thermal Springs* and *Przymiot* (author's own archive)

## Conclusion

Wojciech Oczko (Ocellus) was among the greatest Polish doctors of the Renaissance. He studied medicine in Krakow and at the Italian universities of Padua and Bologna. He was a court doctor for two Polish kings, Stephen Báthory and Sigismund III Vasa. His literary heritage comprises two fundamental works written in Polish which constituted the foundation for Polish balneology and syphidology. In his works Ocellus started to use the new Polish medical terms, many of which are to be found in the Polish Medical Dictionary edited by professor Franciszek Giedroyc, the renowned Polish historian of medicine and published in Warsaw in 1931. Ocellus' works are written in a very modern manner and they encompass a number of medical specialties including nephrology. His work *Thermal Springs* presents the possibility of treatment of some urinary tract diseases with medicinal waters. By general consent Oczko aka Ocellus is regarded the "father of Polish balneology". Besides his

medical activities, Ocellus is famous for representing a typically Renaissance-like model of a humanist expressing his affection towards Antique culture and literature. His Krakow-based education equipped him with perfect command of Greek and Latin and profound knowledge of works by ancient masters. What is more, his Italian period offered him a chance to meet the greatest figures of the Renaissance and to obtain top-quality medical knowledge of the time which he later transplanted to Poland. Creation in his native Polish made him rather hermetic preventing his works from entering the European cannon of medical literature. It is the authors' hope that this publication will bring Wojciech Oczko (Ocellus) closer to the international world of medicine, thus, triggering research and investigation by historians of medicine including those dealing with the history of nephrology (14).

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