

Giovanni Battista Cambieri and the Beginning of Venereology in Rijeka Region

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SUMMARY In 1790, an infectious disease appeared in the village of Škrljevo near Rijeka, and spread to the nearby villages and then to Istria, Slovenia and other parts of Croatia. In 1800, the nature of the disease was first investigated by the protomedicus Massich, who believed it was a combination of syphilis and scabies. After him, the protomedicus of the region G. B. Cambieri, who graduated in Pavia and came to Rijeka in 1797, studied the illness, gave a description of the disease and believed it was a *morbus sui generis*, and termed it morbus of Scherlievo. He was a gifted physician, used all his knowledge, skills and organization capabilities to arrest the disease, and published his works in Italian journals (in 1812 and 1819). Cambieri studied the disease in thousands of patients in local hospitals, and took the initiative to open a new Civic Hospital with a department of syphilidology. He divided the disease into four stages and with permission of the authorities he tried different therapies. With time, he found the disease to be a form of syphilis and treated it with mercury compounds. After his death in 1838, he left his money to the Hospital of Holy Spirit in Rijeka (Cambieri Foundation), which permitted its development.

KEY WORDS: Cambieri, Škrljevo, mercury, Civic Hospital

INTRODUCTION

At the end of the 18th century, around 1790, near the city of Rijeka, which was a *Corpus separatum* under Hungary based on the empress Maria Theresia's decree from 1776 (1), in the village of Škrljevo appeared an unknown infectious disease characterized with bone pain, oral manifestations and skin lesions (2). Soon, the disease spread to the nearby villages and then to Istria, other parts of Croatia, and Carniola (Slovenia). In 1800, the authorities of the city commissioned the protomedicus Leopold Massich and the surgeon Fandler

to reach the village, investigate the nature of the disease, the number of affected persons, and also the origin of the disease. In July 1800, Massich gave a detailed and conscientious account in Latin to the municipal authorities: about 2600 people were affected with the "new disease", the disease was probably imported by seamen returning from the Danube region, and he thought it was a combination of syphilis and scabies, *morbus venerosca-biosus* (2). After him, the disease was investigated by many other physicians of Rijeka district or other

regions of Croatia, and each believed a different cause for the disease: contaminated water, a form of leprosy, scabies, scrophulosis, scurvy, and so on. The skin diseases were treated, as it was habitually at the time, by local surgeons, mostly with plant preparations (2,3). In 1801, the number of the infected patients increased, so the protomedicus (physician in chief) of the region Giovanni Battista Cambieri was committed by the government to reach the village, investigate the disease and propose a better treatment. In this paper, we present Cambieri's work and its importance for the development of venereology in Rijeka region.

CAMBIERI'S LIFE AND WORK

Cambieri was born in 1754 in Torre del Mangano near Pavia, studied in Pavia, at that time an outstanding medical school, where he received excellent education and graduated in 1778, under S. A. Tissot who considered experimentation and autopsy essential for the physicians (4). He left Lombardy because of the Napoleon's invasion, and after a short period in Vienna he came to Rijeka in 1797, just in the year when the French army occupied Rijeka for the first time, but fortunately only for a few days (1,5). Cambieri, a gifted and very humane physician, soon became protomedicus and was charged by the government to investigate the calamity around Škrljevo. In about a week, he examined more than 2000 patients of both sexes and of all ages, studied the course of the illness, gave a detailed description of the disease and believed it was a particular disease, *morbus sui generis*, similar to the Sibbens in Scotland, the Disease of Canada, Radesyge, and Framboesia, and termed the "new" disease morbus of Scherlievo, although he also noted many similarities with venereal syphilis (2,3).

Cambieri and other physicians used different terms to name the disease such as Scherlievo or Skrilievo (2,3), Scarlievo (6) and others, being hard to adopt the Croatian pronunciation and writing the place name. The disease was also named "mal de Fiume" or *morbus Flumicensis* (correct *Fluminensis*), i.e. Rijeka disease, but the examination revealed that the town inhabitants were affected in the minority, or "*morbus Grobnicensis*" after the place of Grobnik near Rijeka, and even *morbus Croaticum* (7). The "new" disease spread fast primarily among the local population, assuming the character of an epidemic, especially in rural areas, and spread to the nearby villages of Praputnjak, Fužine, Jelenje, Viševica, Draga, Grobnik, Kukuljanovo, Krasica, Delnice, i.e. the elevated part of

the territory, while in Rijeka the disease was rare, probably because of better social, economic and hygienic conditions present in the town. Cases were rare on the Kvarner islands. The new epidemic posed a challenge for local physicians and surgeons of the time (8). They mostly treated the disease with plants. Some believed the disease was not a form of venereal syphilis as there was no genital chancre or "*porta invasionis*", and no regional lymphadenopathy. Generally, two main hypotheses were put forward by the physicians of the time that may be defined as unitarian and dualistic ones: the former believed that it was a single disease, i.e. a form of syphilis or other, while the dualist claimed it was a mixture of syphilis, scabies, leprosy, scurvy, and so on (7). Interestingly, the patients affected with "Škrljevo" did not show any signs of gonorrhoea (2). Many physicians of the time believed syphilis and gonorrhoea to be the same disease, especially after the unfortunate experiment performed by the surgeon John Hunter on himself in 1767 (9), although in 1793 Benjamin Bell, another Scottish surgeon, after experiments with inoculation in his students had demonstrated that syphilis and gonorrhoea were two separate venereal diseases (10). It is interesting that Cambieri knew Bell's work (2,3), but definitive evidence without any doubt that gonorrhoea and syphilis were different diseases was provided by Philippe Ricord, after more than 2500 inoculations, half a century later (11).

Cambieri used all his knowledge, skills and organization capabilities to arrest the disease, and even contacted Johann Peter Frank, the greatest authority in hygiene and social medicine of the time, who held lectures at many medical schools including Pavia, who agreed with his opinion (12). In 1801, the number of cases, mostly rural people, increased to 4500, and Cambieri was charged to find new remedies for morbus Škerljevo. The disease was generally treated by surgeons with plants such as bryony (*Bryonia dioica*), burdock (*Artium lappa*), bittersweet (*Solanum dulcamara*) and diet (2,3). Vienna first sent Stahly to the region, however, with little results; then Stiff who proposed better measures to eradicate the disease, but because of the Napoleon's conquest of the region (1809-1813) they were not applied (13). Later, Cambieri sent a memorandum to the France government (6), and published the result of his investigations about Scherlievo in two Italian journals (2,3). His publications are characterized by deep observations and detailed description of the cutaneous and mucosal changes in endemic syphilis.

He was an erudite and gifted clinician, a skilled researcher, an outstanding organizer and a charismatic man (he also became a patrician), and a benefactor. After careful examination of thousands of patients, Cambieri divided the course of Škrljevo disease into four stages (13): the onset of the disease with a prodromal stage in which the patients present malaise, fever, pain in bones, dorsal spine in particular, headache (*cephalea nocturna*), and lasts for about two weeks. The second stage (*stadium eruptionis*) manifests with lesions of the oral cavity, sore throat, erythema of the tonsils, uvula and palate, and erosions, all accompanied by hoarseness (*vox rauca*) and problems with swallowing. Numerous lesions such as maculae and papulopustulae of cupreous color, sometimes on the head in the form of "*corona veneris*", crustae, squamae, condylomata lata and others are found on the skin, all described by Joseph Plenck in 1776 in his book "Doctrina de morbis cutaneis", and even better and simplified by Robert Willan in his "Description and treatment of cutaneous diseases"(14,15). The third stage develops after 3-4 years and is marked with nodules, tubercula and furunculous lesions on the skin. Mouth ulcers were observed and described. In the fourth stage, the bones become enlarged and then destruction occurs, especially on the nose and forehead. Here we will remember that Ricord made his classic division of syphilis into three stages in 1858 (11), and later E. Bazin introduced the quaternary stage (visceral syphilis).

Cambieri's treatment was based mostly on different mercury compounds (cinnabar, sublimate corrosive, mercuric oxide, mercuric sulfide) that were used until the patient had salivation. He tried to find out the mercury compounds and type of application that would be more effective (topical, systemic, fumigations with cinnabar) in the treatment of syphilis (2,3). In the description of his treatment method, he pointed out not only the favorable effects but also the adverse reactions (stomatitis, salivation, vomits and diarrhea). It is to note that as early as 1754 Saverio Graziani, the protomedicus of Rijeka, wrote his book "De usu mercuri", in which he described all the possible uses of this metal in the treatment of diverse diseases, and was praised by Gerhard van Swieten, personal physician of the empress Maria Theresia (16).

Besides mercury, Cambieri also recommended the use of decoct of plants such as *Aconitum nepellus*, *Conium maculatum* (cicuta), sarsaparilla (smilax), guaiacum, and hot baths (2,3). While making all efforts to find the best treatment, he

observed that sometimes the disease cured spontaneously and that the disease was never associated with gonorrhoea as is the case in venereal syphilis.

Cambieri studied experimentally by inoculations of the possible infection in the early and later stages of the disease, and so did the surgeon Fachinetti. This surgeon working at the Hospital of Kraljevica, after experiments in 7 patients, discovered that inoculations from old syphilitic lesions were not contagious, which was an important finding (17). Ricord asserted erroneously that secondary lesions were not contagious. By means of inoculation from syphilitic lesions they tried to cure or even immunize the sick and healthy people, which was unethical and wrong (7). Prejudices, charlatans and quacks also posed a hazard for the suffering and created problems to the physicians.

In the 1920s, von Stiff's measures were applied and gave good results. They consisted of obligatory examination (visitation) of the complete local population (*lustratio populationis*), obligatory treatment, obligatory hospitalization of the affected people in the hospitals of Rijeka and Kraljevica, and disinfection and cleaning of their homes. So, in 1818, more than 127,000 persons were examined or 97% of the population, and about 4000 cases of the disease were identified (13). All hospital costs, drugs and measures were covered by the government.

In 1786, the Civic Hospital and poorhouse of Rijeka was removed temporarily to the Augustinian convent of St. Jerolimus, but because of the French occupation of the Region (1809-1813, Illyrian Provinces) and financial problems it remained there for a few decades (7). In 1813, the French left Rijeka after the disastrous Napoleon Russian campaign and the battle of Leipzig. So, after the Vienna Peace, for a few years, Rijeka returned under the Austrian monarchy and in 1822 ceded to Hungary, and so did a part of Croatia (1,18). In 1818, Cambieri was committed by the Austrian government to study and experiment new treatments of the disease in 20 patients in the local Hospital, and formed the Department of Syphilidology (17); in the 1820's, he took the initiative towards the city government to open a new Civic Hospital. The government formed a four-member commission which soon approved Cambieri's idea and so in July 1823 the hospital opened in the ex Waxes fabric Cavalli-Licudi that was hardly up (19). Here the Civic Hospital of Holy Spirit remained for about a century (20).

It is of interest to note that many of the greatest dermatovenerologists and physicians of the time such as J. Alibert, J. P. Frank, F. von Hebra and L. Sigmund, who also practiced inoculations in Vienna, were acquainted with the disease and dealt with it in their writings (7,12,21). With time it appeared clear that the disease was endemic syphilis and not a *morbus sui generis*, so that Pernoher closed the Hospital of Kraljevica (22).

Cambieri was an authority on this disease and believed the disease to be different from venereal syphilis because of the lack of genital chancre, the course was not fatal, and it did not attack internal organs. For his experience in the treatment of the disease he was also consulted for the epidemic of "falcadina" present in the region of Belluno in Italy.

At least an important work about the disease was made by dr. A. F. Giacich, chief of the Škrljevo Department after Cambieri, who wrote a paper on the disease in Italian in 1862 (23). He gave an accurate and complete clinical description and believed the disease to be a form of syphilis that was rarely transmitted sexually but mostly by kissing, by objects, and hereditary, which was not correct. He underlined the importance of social and economic factors in the spread of the disease.

Many physicians wrote their doctoral dissertations about Škrljevo disease in Padua, Vienna and other medical schools during the first half of the 19th century (7). Interestingly, in the first half of the 19th century, the Croatian physicians who wrote about the disease used mainly Latin, Italian, German or other languages. The first paper on Škrljevo in Croatian language appeared in 1878 by Perišić, who worked in Zadar (24). At the end of 19th century, the disease disappeared in the region.

Cambieri also introduced the use of galvanism in therapy (6). He remained unmarried and so in his will he committed after his death (in 1838) to leave all his money (about 31,000 florins) to the local Civic Hospital of Holy Spirit (Cambieri Foundation), which permitted its improvement and development (25).

In the 20th century, numerous Croatian physicians wrote about morbus Škrljevo, among them some from Rijeka: N. Bonetić who was the first head of the new Department of Dermatology at the Sušak-Rijeka Hospital, and Kosić who reported on patients treated at the Hospital of Kraljevica (13,26). After World War II, the subject was tackled by Medanić *et al.* and Muzur and Škrobonja *et al.* (20,27).

Today, when we know the causal agent and have penicillin to treat the disease, it can be strange how the physicians looked upon and treated the disease in the 19th century. In Cambieri's time, the causal agent was unknown, there were no serologic reactions to confirm the diagnosis, and statistical methods had not yet been introduced in medicine. Probably not all patients that had been treated for syphilis were affected by this disease. We can agree with the opinion of the authors who believed that in some cases local people had simulated the disease to avoid mobilization to the French army and perhaps in some cases the diagnosis of morbus Škrljevo was a "fashionable diagnosing" (20). Nevertheless, the occurrence of this "new" disease greatly contributed to the development of medicine science in Rijeka (7). It is also to note the great number of beds put at disposal of patients during the epidemic, and massive lustration among the people of the region at the time. Numerous physicians from Rijeka district and Croatia but also from Italy, Slovenia, Austria, Hungary and France studied and tried to arrest the spread of the disease. Recently, Slavec wrote a noteworthy book about Škrljevo disease in Slovenia (28).

CONCLUSION

Dr. Cambieri dedicated his entire career to treat or prevent the disease and relieve the suffering of the patients. Studying endemic syphilis from 1800 to 1838, experimenting with new ways of therapy for the disease, and writing about it he gained high appraisal from his contemporaries. In addition, he favored opening of a new hospital, and working at the department for Scherlievo-syphilis he became a pioneer of venereology or perhaps better syphilology in Rijeka region and in Croatia. For his contribution to the development of medical thought in Rijeka, his bust was placed in the entrance hall of the Civic Hospital, with inscription dedicated to him by grateful people. Later, a town square was named after him. Today, a street adjacent to the Rijeka University Hospital Center bears his name.

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