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Caretaker of the Skin

Edited by Andrzej Grzybowski MD, PhD, MBA

## Peter the Great and Sexually Transmitted Diseases

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### Abstract

Shortly after syphilis appeared in Europe at the time of Columbus' voyage to the New World, the big pox, as it was often known, became a serious issue in Russia for diagnosis, treatment, and prevention. Members of the Russian royal family were made aware of the disease from adolescence onward. Tzar Peter the Great had many sexual contacts and could have contracted any number of sexually transmitted diseases (STD) that were quite common in his era. Contributions analysed from available sources by his contemporary doctors, and later medical analyses, reveal no evidence that he had contracted syphilis or any other STDs. Most likely, he died from acute renal failure due to urinary tract obstruction.

### **Did Peter the Great suffer from syphilis?**

This idea has been discussed for many years. At present, physicians and historians who have addressed this problem believe that the complications of Tsar Peter's urologic problems at the end of his life were due to gonorrhoea. The idea that syphilis caused the tsar's death was widely spread from the beginning of XVIII century, (1) while it was not fully established until the 19<sup>th</sup> century that syphilis and gonorrhoea were accepted as two distinct diseases. (2)

During the reign of Peter, I (1682-1725), known as Peter the Great, as he stood six feet eight inches tall, the fight against syphilis was multi-faceted and systemic in nature. The Tzar, being a pragmatist and having personal experience from gonorrhoea treatment, understood perfectly well how the consequences of syphilis affected the moral and physical conditions of his soldiers and officers of the army. This explains why military hospitals, opened at the time of Peter I, had wards for soldiers and officers infected by contagious diseases, including syphilis.

The Moscow Hospital School was founded in 1707, followed by military hospitals, established in Petersburg (1716), Kronstadt (1720), Revel (1720), Kazan (1722), and Astrakhan (1725). In all, 10 hospitals and over 500 field hospitals were opened under Peter I in Russia. (3). The tsar also may be remembered for building the new capital of the now Russian Empire at the Neva River to provide an all weather seaport.

In the last year of the tsar's life, his health had significantly worsened. In February 1724, Peter I, together with his wife Catherine Alexeievna (1729-1796), set out to seek the cure with mineral waters. Peter the Great had been among the first of the Russians who would make regular trips to "take the waters." As early as 1698, he had visited Baden Baden for the cure, in 1716 – the Piedmont waters, in 1717 – the Spa and Aachen waters, and in 1722 – the healing waters at the Terek River. He also made several trips to Lipetsk and Olonets (1719, 1720, 1722) to partake of their mineral waters.

Could this have been for the treatment of various sexually transmitted diseases (STD)? This is suggested by letters to his wife who had once been his mistress. Curiously, he carried on frequent correspondence with her, even though he was surrounded by his new paramours. In June 1717, he wrote to his wife from Spa, where he had undergone treatment with the waters:

I have nothing else to say from here, just that we came here safely yesterday, and since the doctors prohibit to use household amusements during water drinking, that's why I let my mistress go to you, for I could not help making love, should she stay with me. (4)

### Balneology for the Tzar

He was far from the perfect patient, ignoring most of the advice offered by his physicians. For example, he did partake of the mineral water for their salubrious effects, but he always added wine. A contemporary observed that each morning the tsar drank 21 glasses (!) of mineral water from the Puonsky source near Spa. The tsar also ignored his physician's prohibition about eating fresh fruits. He recorded that having just drunk much mineral water, "ate six pounds of cherry and a dozen of figs." (5)

Leaving Spa in 1717, Peter I requested that his physician in ordinary Robert Areskin (1677-1719), a member of the Royal Society of London, draft a document to register his ailments:

I, the undersigned, privy councillor and the first doctor of His Majesty, All the Russians tsar, hereby certify that His Majesty, having substantial appetite loss, weakening of gastric fibers, oedema in legs and occasional biliary colics and paleness in face, came to Spa to use local mineral waters. I confirm the benefit he derived from this treatment, feeling better day-by-day. He daily went to Geronster, located three miles away from here, knowing well that those waters are much more beneficial, if not carried, but drunk at site. Finally, though His Majesty underwent treatment with other waters in different places, he found no waters to affect him better than waters in Spa. Given in Spa on July 24, 1717. R. Areskin. (6)

In May 1724, after the magnificent crowning of Catherine Alexeievna at the Cathedral of the Dormition of the Moscow Kremlin, the emperor's health worsened again. He once more set out to take the mineral waters at the village of Ugodsky Zavod located near Moscow. The nature of Peter's health problems may be estimated from his letter dated June 7, 1724:

I declare you that waters, thank Heaven, act well, and, in particular, have diuretic action no worse than Olonets ones. (4)

On June 9, 1724, he wrote again that he felt much better and hopes with the God's assistance to get rid of the disease.

Friedrich Wilhelm von Bergholz (1699–1765) was a courtier from Holstein who in 1721 accompanied Charles Frederick, Duke of Holstein-Gottorp (1700-1739) on his visit to Russia, staying

there with him until 1727. Charles Frederick married a daughter of Peter the Great and became the father of the future Peter III of Russia. Bergholz's precise daily records are one of important sources of the last years of Peter I's reign. For example, on June 12, 1724, the day of the emperor's arrival in Moscow, he wrote:

They say that he remained very pleased with local mineral waters.

The fact that Peter I increased hydrotherapy to twice a year suggests that his health was continuing to deteriorate. Despite his failing health, Peter I remained involved with matters of state.

He was both a pragmatist and fatalist. He was said to govern with a "consideration" as told to his physician Laurentius Blumentrost (1692-1755) who had studied under Herman Boerhaave (1668-1738) in Leiden:

Disease is obstinate, nature knows what it is doing, but the state benefit should be taken care untiringly, till having energy. (4)

On August 16-20, 1724, the czar was once more ill, not leaving his rooms or taking any medication. Soon, he returned to his social activities, actively participating in the next series of festivities, traditionally accompanied with lavish drinking<sup>1</sup>, which undoubtedly took a toll on his health. It would be an understatement to label Peter's court as being "drunken." As remembered by the Danish ambassador Just Juel (1664-1715), writing in January 1710 from the house of Alexander Menshikov (1673-1729), a close advisor to the Tsar and *de facto* ruler for a two-year period. He recorded that the floor was covered with:

a thick layer of hay, so that upon leaving drunken guests it would be convenient to clean up their muck, spew and urine. (7)

The next month, the czar again was confined to his private rooms. On September 12, 1724 Bergholz recorded in his diary:

His Majesty Emperor has not recovered from the illness completely, that's why physician in ordinary continues permanently spending nights at the court. (4).

All was not well two months later. On November 8, 1724 Willem Mons (1688-1724), the empress's chamberlain, was arrested, tried, and soon beheaded, eight days later. The formal accusation concerned bribery, but in reality, the chamberlain was executed for intimacies with Empress Catherine.

On January 6, 1725 the disease, which had continued to torture the tsar, returned again. The reason given for its recrudescence apparently was a *cold*, which the emperor had recently contracted. Despite the recrudescence of the disease, the tsar still continued to be engaged in matters of state. The crisis in the illness progress occurred on January 16, 1725. Beginning the next day, the Tsar became bedbound. Peter the Great died on January 28, 1725.

Many rumours soon spread about the tsar's death both in Russia and elsewhere. One of the common versions connected his death with the consequences of "syphilitic contagion". Kazimir Valishevsky in his book "Peter the Great" wrote: "On September 8, 1724 the diagnosis of the disease became finally clear: this was sand in urine, complicated with return of poorly healed venereal disease". During the early Soviet era (1920s) this "diagnosis" was promulgated by Mikhail Pokrovsky (1868-1932) a prominent historian who "rewrote" the history of Russia at that time. He accentuated the wording even more; kidney disease was excluded, and only syphilis was left:

The death of the reformer was the worthy final of this feast at a time of plague. Peter died, as is commonly known, from the consequences of syphilis, caught by him, in all likelihood, in Holland and poorly cured by the then doctors.

Pokrovsky, unfortunately, states this without any references.

### **Speculation on the Cause of Death**

A different hypothesis comes from reports of the French ambassador to Russia Jacques de Campredon (1672-1749) published in the latter part of the nineteenth centuries (4). In September 1724, the ambassador reports to Versailles:

Tsar is still suffering retention of urine. He doesn't lie sick due to this disease so far, but it still hinders him from engaging in matters... They assure the disease is trifling.

This report does not give the slightest indication of a STD as the main reason of the illness; however, in the January 19, 1725 report, reference is made to the words of "one Italian doctor" whom de Campredon calls his friend and who took part in the tsar's healing, he writes that the reason of disease is the retention of urine, which developed as a result of "inveterate venereal disease." Only after the tsar's death was the ambassador informed in his report that the "source of disease was inveterate and poorly healed syphilis." (4)

This version was subject to criticism by Wilhelm Richter (1767 — 1822), author of the first book on the history of Russian medicine, who asked the question:

Is it possible that such educated doctor as Laurentius Blumentrost (junior), while encountering syphilis case, could not diagnose the disease using a well-known method, prior than it could have such harmful consequences? (8)

The main "source" of the French ambassador was the Italian doctor Azarini. Laurentius Blumentrost (1692-1755) the personal physician to the Tsar, founder and first president of the Saint Petersburg Academy of Sciences, from 1725 to 1733.

Nicolai Pavlenko (1916-2016), historian and biographer of the tsar, based on the doctor's declaration made four days before the tsar's death, stated:

The strong tsar's body would rather combat the disease, if the monarch would follow his advices, it is beyond question that in this particular case he made a chain of mistakes both in diagnosis, and the outcome of disease determination. (4)

Besides, an important argument is against the "syphilis version," not reported by any of European diplomats, then staying in St Petersburg, except for the French ambassador. Diplomats were quite informed people, and they would not let slip the opportunity to report about such a spicy bit of scandal. Richter himself believed that the main reason, leading to the tsar's death, was an inflammatory process, caused by urinary retention.

The first signs of "troubles with urine" in the tsar were noted during the Persian Campaign in 1722 in Astrakhan. From the next winter "troubles with urine" flared again; in 1724, the illness occurred "with a great pain" and, eventually, turned into complete retention. In order to address the problem, his physicians resorted to catheterization with a silver tube (several times a day!), which was not only a painful procedure, but it also continued to traumatize the urinary tract.

They then invited the Dutch doctor Nicolaas Bidloo (1673/74– 1735), who treated Peter I as early as 1703. The situation was such that catheterization by the English surgeon William Horn (1729-1810) did not solve the problem due to synechias that had formed in the urinary tract. (8) Horn had studied in Paris and for two decades worked in Paris hospitals. Peter I in 1717 accepted him into the Russian service. Since 1719, he was "the first outpatient doctor" and professor of surgery. At the same time, he worked in the admiralty hospital on the Vyborg side of the capital. In 1724, he operated on Peter I on several occasions; however, he was dismissed in 1732. (8)

For the tsar's treatment, they sought consultations of foreign doctors. Descriptions of the disease, made by Blumentrost, were sent to Leiden to Herman Boerhaave (1668 –1738) and to Berlin to Georg Ernst Stahl (1659– 1734), a German chemist, physician, and philosopher. Unfortunately, the tzar died before their recommendations could reach Petersburg.

Richter mentioned that during the autopsy "there was a noticeable a callus in the muscle of bladder and St. Anthony's fire." (8) According to his diagnosis "troubles with urine" turned into "inflammatory retention." Richter assumed that the immediate reason for inflammation could be the catheter but was unable to associate Peter's death with either gravel, cancer, poisoning, or venereal disease. The reason for the monarch's death, he believed, was an inflammatory process, caused by retention of urine. Another report from 1872 proposed that "the odds are that the death followed because of the catarrh of the bladder, turned into gangrene, and due to urine retention." (4)

There are no official documents about the tsar's autopsy. Preparations of Peter's body for burial, come only from Jacob von Staehlin-Storcksburg's (1709 - 1785) anecdotes. This information appears credible, because its source was Paulson, who had been treating the tsar together with other physicians, in the last year of his life:

At autopsy of his body we saw a complete St. Anthony's fire in parts near the bladder; some parts became so hard that it was rather difficult to cut them with a dissecting knife" (9)

At the same time, some historians of medicine, while describing the last stage of Peter's disease, did not answer the question about the reason for the inflammatory process, itself. Whether they did not have an accurate account of the last days or whether the "syphilis version" cast a shadow is unclear. This may account for the two medical expert reviews that were carried out during the Soviet era.

#### Speculation about his illnesses

In 1970. all known testimonies of contemporaries about the illness and death of Peter the Great were sent to the Central Institute of Dermatovenerology in Moscow to make a conclusion. The Commission concluded:

Peter I, apparently, suffered malignant disease of prostate, or bladder, or urinary stone disease. (4)

In 1990, for the first time in the Russian historiography, documents were published that had a direct relation to the history of Peter the Great's disease. (10) These documents, connected with description of Peter's disease, were prepared at the end of 1715 - the beginning of 1716 by the

court doctor Blumentrost for his European colleagues. The addressing itself, as well as the history of Peter's disease, did not reach us, but opinions about it, of prominent European doctors of that time, remained. The authors of the opinions were: Bernard Albin (1653-1721), professor of theoretical and practical medicine of Leiden University; Johann Philipp Breyn (1680-1764), noted scholar of medicinal herbs and author of essays in phototherapy; and Johann Conrad Brunner (1653-1727), professor of Heidelberg University. Answers of European doctors, written in Latin, are dated March 1716. Only one of these opinions was made upon direct examination of the patient by J.P. Breyn and the two others, in absentia. According to the conclusion of specialists from Military Medical Academy in 1716, the tsar's problems were reduced to complaints on diarrhea, periodic fever, heaviness in epigastrium, pains in the region of diaphragm and hypochondriums, reduced appetite, nausea and bleeding gums.

“It is obvious that for a number of years the tsar suffered from chronic, periodically recrudescing disease, which clinical picture involves six syndromes: dyspeptic, asthenoneurotic, noxious, arthralgic, feverish and hemorrhagic”. (10)

From an analysis of these findings, a diagnosis of chronic hepatitis was made. Indirectly, this diagnosis may have been confirmed due to the successful treatment with mineral waters. The tsar continued his heavy imbibing of alcoholic beverages.

Analysing the disease, which caused the tsar's death, the authors from the Central Institute of Dermatovenerology mention that first signs, related to urinary retention, appeared in 1722. They stated: “there is no doubt that this is azotemia, which may be caused by chronic hepatitis”. From clinical practice, it is known that at chronic hepatic failure renal function often deteriorates, progressively worsening without reasonable justification. Troubles with urine outflow, leading eventually to azotemia, may be present in double-sided ureteral obstruction with stones, compression of the latter with carcinoma as a result of tumor process of genitourinary organs, with development of prostate adenoma and urethral stricture due to inflammatory process in the urinary tract. Urine retention continued for almost three years (1722-1725) and was not accompanied with clear clinical signs of a malignant tumor (cancerous cachexia and others), thus this diagnosis may be rejected. We believe that it is not worth considering double-sided ureteral obstruction, because during anatomopathologic examination, no stones were found in them, but “it was a noticeable callus in the muscle of bladder and St. Anthony's fire”. They have assumed that the reason for azotemia was either prostate adenoma, leading at its final stage to urinary retention and development of uremia, or urethral stricture, developed due to inflammatory process. (4)

They also rejected categorically the syphilis version. Making reference to Richter work, they noted:

“even now we have nothing to add to his argumentation, it remains only to regret that craving for sensation often dominates over the pursuance of scientific truth" (10)

They concluded that the most probable cause of the tzar’s death was urosepsis triggered by acute renal failure and complicated by uremia due to obstruction of the urinary tracts. (1)

### Conclusions

Peter the Great may have had many sexual contacts that could have led to his contracting one or more sexually transmitted disease, not uncommon at the time. We have analysed the available sources written by his contemporary physicians and later medical analyses, finding no evidence for the assumption that he died from syphilis. The cause of death was most likely urinary tract obstruction.

### Figures legend

1. Portrait of Peter I. Jean-Marc Nattier, 1717.
2. Life mask of Peter I. Carlo Bartolomeo Rastrelli, 1718.
3. Portrait of Peter I on his deathbed. Ivan Nikitich Nikitin, 1725.

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Figure 1



Figure 2

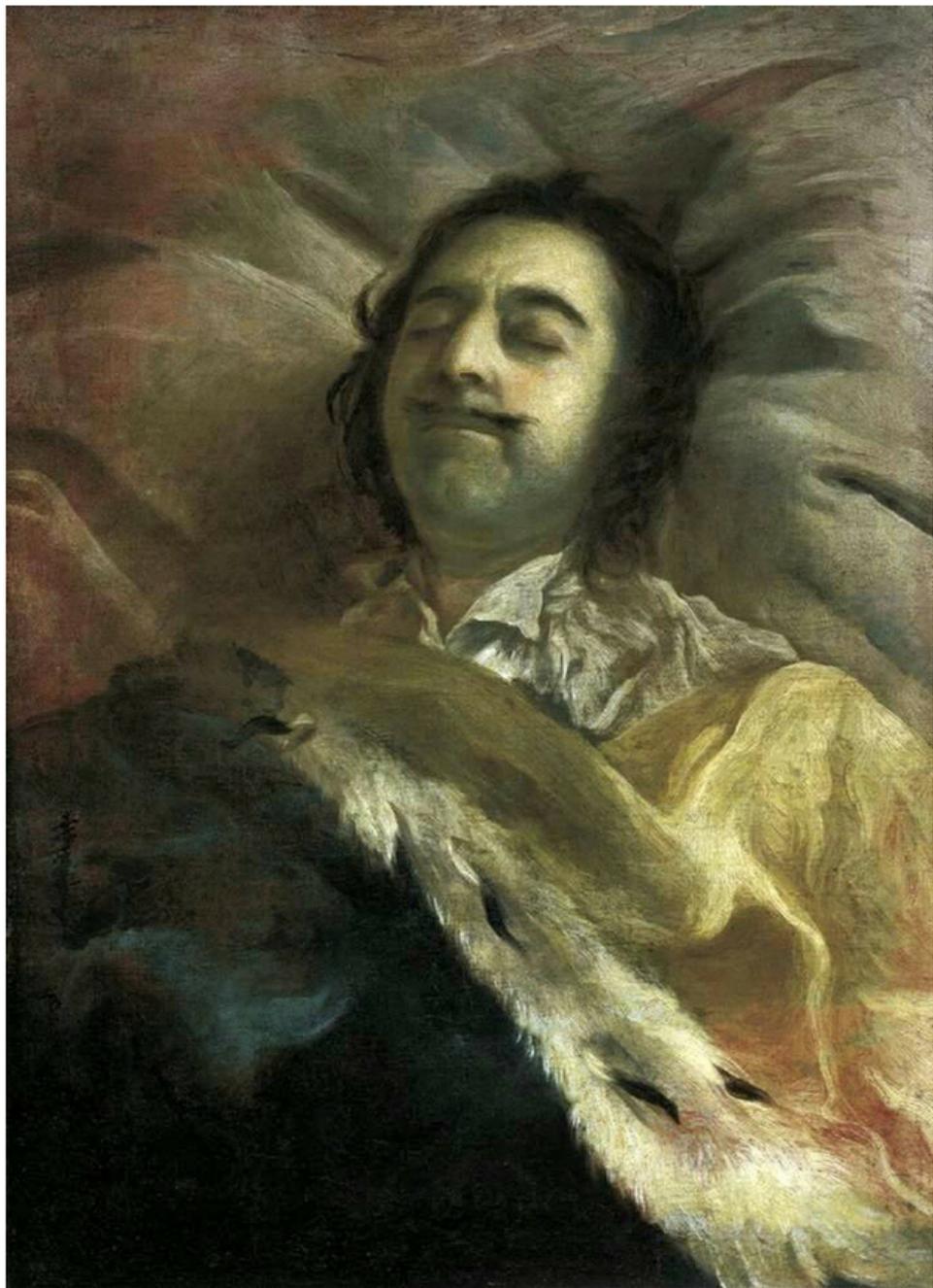


Figure 3