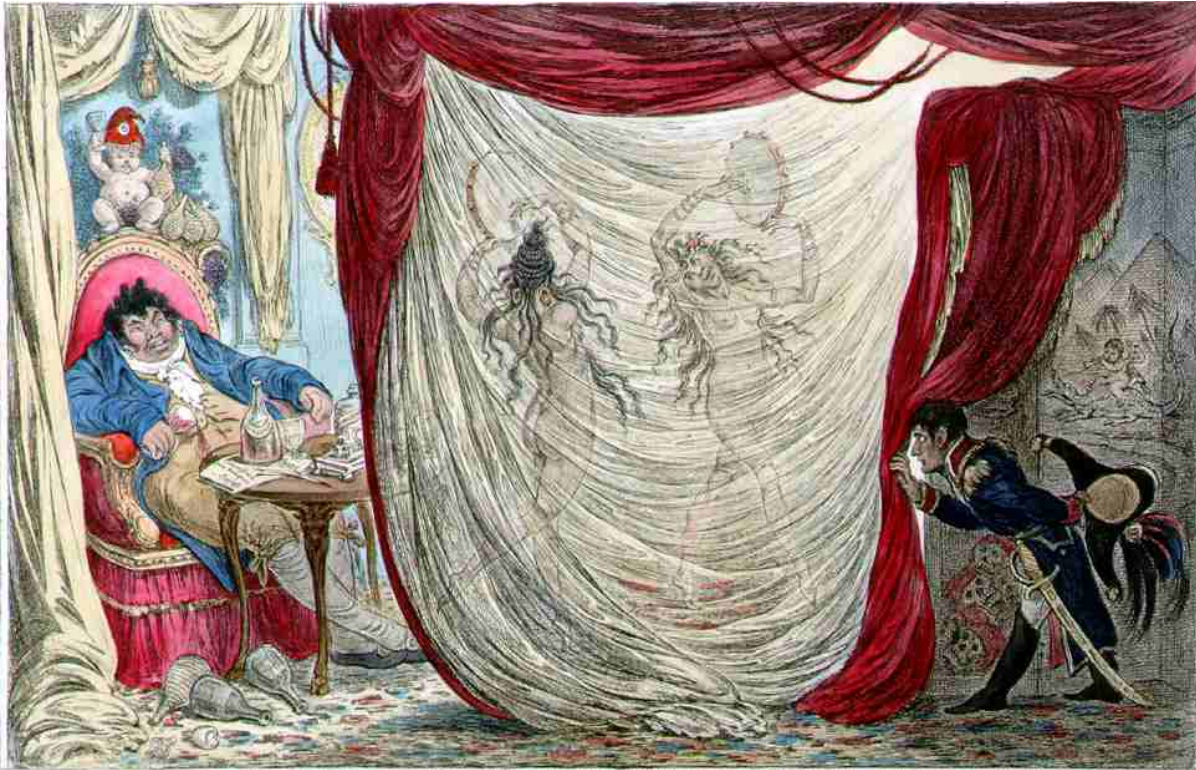


WHAT KILLED NAPOLEON?



Madame Tallien and the Empress Josephine discover Naked before Barras on the Winter of 1797. — A Fact! —

The health of Napoleon has always been surrounded by controversy and has been reported by many biographers. If all of them are to be believed, his state of health was vulnerable and over the course of his lifetime he is thought to have suffered from up to 43 individual diseases, all of which have been studied by many doctors over time.

There have long been rumours, but no proof, that he was infected with gonorrhoea and syphilis by his wife Josephine. Look closely, however, and the evidence is there in the myriad biographies published since his death in 1821. This evidence can be evaluated using the everyday method of practising doctors which links careful clinical observation with macroscopic post-mortem data. This method revolutionised diagnosis in the late 18th century leading to the identification of many diseases in the 19th and 20th century, and is the method used in this study.

The controversy over exactly what killed Napoleon arises for a variety of reasons unconnected with the quality of the medical evidence reported in the biographies. The Napoleonic legend and its various propagandists, the diagnostic obsession of the first half of the 20th century with the glandular hypothesis (hormones), and a failure to look at the whole picture all contrived to obscure the truth of the emperor's demise. Studying Napoleon's diseases is an absolute minefield for the unwary, with apparently competent authorities skipping over information and suggesting impossible diagnoses.

The evidence of disease in an historical figure is the description of the syndromes. This paints the clinical picture. In 80% of cases, physicians will arrive at a diagnosis by looking at the symptoms a patient first presents with, and the remaining 20% according to the progress of the disease. With neurological disease in particular, it is often possible to make a firm diagnosis on clinical grounds alone.

The end of the Reign of Terror saw a high level of promiscuity in France, making syphilis a very common disease. Its incidence varied in different populations ranging from 15% to 40% and as high 60% in the army.

In sexually transmitted diseases the 'contact' history is of particular importance. Josephine had two children by her first husband, Alexandre de Beauharnais. After her separation from him she had a number of casual liaisons but was by this time sterile, a common feature of gonorrhoea.

In 1795 Josephine became Paul Barras' hostess and participated in his orgies. Paul Barras was a politician of the French Revolution whose immoral private life was seen as representative of the moral rot at the heart of French society. It was Barras who helped facilitate the relationship between Josephine and Napoleon. If Josephine acquired the diseases during her time as a hostess, she would have been infectious by the time of her seduction of Napoleon before her marriage to him in 1796. She had begun to suffer severe headaches, which grew steadily worse. Over time, she came to suffer from depression and her headaches were now accompanied by fever. She became anxious and developed a cycle of alternating bad and good health. Finally she suffered from eye pain and inflammation, tinnitus, a humour [sic] in the head, and hoarseness; all features of neurosyphilis. In 1814 she died of a quinsy.

We can trace a direct line of contact from a known sufferer, Jean-Andoche Junot, an esteemed French general who later became Napoleon's secretary. Junot died of rapidly progressive syphilitic psychosis by defenestrating himself. He had had a longstanding affair with Caroline Murat (nee Bonaparte), whose husband Joachim Murat had bedded Josephine when acting as Napoleon's advocate for her to join him in Italy in 1797.

Further evidence of syphilitic contact can be found in Napoleon's family history. Of Napoleon's blood relations, his brother Louis had a syphilis of the type which gives rise to severe limb pains. His sister Caroline was an intermediary contact. Further siblings Joseph and Pauline were known to have gonorrhoea (and so probably syphilis), and Pauline is described as a nymphomaniac (the female equivalent of satyriasis), making the diagnosis more likely. This makes a 50% incidence in Letizia Bonaparte's surviving children.

Neuro-syphilis is a disease of relapse and remission. While in remission, the sufferer's health is generally good. It is important to note that until the onset of dementia or psychosis, a patient's personality remains more or less intact and during remission, patients (such as the composer Schubert) remain capable of the very best professional work.

Napoleon's headaches started in 1797. In the first year after his marriage Napoleon developed a pain on urination. He noted while on St Helena that his surgeon thought he had gonorrhoea; a full discussion indicating that the condition was gonorrhoea is in the French literature.

In 1802, aged 33, he began to have attacks of stomach pains. These were severe enough to have him rolling on the floor in agony, and were accompanied by vomiting. The description of these attacks is that of the gastric crises of syphilis. As the disease took hold, he began to suffer temper tantrums and rages (as did Schubert). These rages went quite beyond the range of normal fits of temper: he became quite uninhibited and would often break things and hammer the floor like a child.

In 1803, while at Brussels, he developed a chest infection and began coughing up blood, probably due to tuberculosis. The same year, aged 34, he had his first fit and another in 1805. His later fits were concealed by Josephine and Bourrienne. The clinical picture of his fits does not suggest epilepsy. Fits occurring first between the ages of 30 and 45 had two principal causes™ tumour

and syphilis; fits are the most common presenting symptom of neuro-syphilis, present in 24% of cases.

Many authors have taken pains to describe Napoleon's sex life but few have commented on such matters as the significance of the age at which it commenced, and, after its initial normality, the change to satyriasis followed by its abrupt cessation after Borodino. These details are all of great interest to the clinician.

In 1802, at the age of 33, Napoleon developed morbid sexual cravings, often described as satyriasis. Having been a very prim and inhibited youth up to the age of 25 (his only notable encounter a single experiment at 18), he went on to have a normal, if not proactive, sex life. However, at the age of 33 seem to develop an insatiable carnal appetite. He became a womaniser on an impressive scale and seems to have had more than 28 identifiable mistresses in the years 1802 - 1812. And these are just the ones we know about.

In 1806, while at Austerlitz, Napoleon suffered from red eyes which lasted some eight days. This could well be the uveitis of syphilis. In 1811 aged 42, we are told that his thinking became muddled and he was often seen to flatly contradict himself. A year later he had become very optimistic seeing only the bright side of things. By this stage, people were beginning to notice his variable state of mind, and his ideas were described as "between Bedlam and the Pantheon". He was accused of *Folie de Grandeur* and being out of touch with reality. His health was poor and he was prone to bouts of depression. He did not look well, either. He had a large body, massive head and spindly lower limbs and was subject to fits of somnolence. He had a tremor in his left calf and face.

The Emperor's physical appearance ("a lemon on matchsticks") has caused authors to postulate numerous pathological causes, all of them controvertible. If Napoleon had idiopathic Cushing's syndrome in 1812 it is doubtful that he would have lived to 1821; he could not have had Froehlich's syndrome, a disease of young boys which prevents puberty and precludes any sex life, and a glance at a picture of an acromegalic face and hands shows that Napoleon could not have had this, his hands being small and feminine.

An alternative explanation is that the Emperor suffered from simple obesity and his legs were those of a patient with *tabes dorsalis* (a late form of syphilis that attacks the spinal cord).

After his return from Elba, the statesman Joseph Fouché remarked that Napoleon was even more demented than when he had left and would not last four months. During the Waterloo campaign of 1815, he was weary and withdrawn, impatient and irritable, and quite without the incisiveness of Austerlitz. He was no longer given to outbursts of temper and had developed a heavy gait and hesitant gestures.

On HMS *Bellerophon* his appearance was unkempt, his movements ungainly. His walk is described as something between a waddle and a swagger. After his defeat at the Battle of Waterloo, Napoleon was exiled by the British to the island of St Helena. When the sentence of confinement was passed down, he showed no sign of anger or strong emotion but simply stated that being sent to St Helena was his death warrant. This is a typical progression of neurosyphilis.

By this time Napoleon had a relaxed, mask-like face without a single wrinkle. The description of his immovable countenance indicates the stage of syphilis following tremors when innervation is lost. Other symptoms included slurred speech, weakness in his legs, abnormal sensitivity to light, shooting pains. The cycle of good health and sudden illness was ever more obvious.

At Borodino in 1812, Napoleon was suffering from a severe infection of the urinary system with rigors and loin pain. This infection did not resolve for eleven days, until two days after he arrived in Moscow.

Following this attack he had difficulty passing urine and had to strain. This can be diagnosed as a urethral stricture, most likely due to gonorrhoea. Such strictures become narrower over time. It is likely that this infection led to reflux down the ejaculatory ducts, leading to testicular atrophy by causing an inflammation around the testicles (epididymo-orchitis). This would explain the feminisation of the body and small testicles noted at his autopsy.

Testicular atrophy leads to loss of testosterone and impotence. We have no evidence that Napoleon bedded a woman after Borodino. Countess Marie Walewska paid a secret visit to Elba, but they slept in separate rooms. He had already rejected the offer of three women to share his exile before leaving France. On St Helena, Albine de Montholon remarked that some men of Napoleon's age can still behave like young men. Napoleon's refusal to accept a mistress on Elba indicates either a lack of desire or ability. The exchange with Albine suggests that Napoleon was impotent and they both knew it.

Thus his satyriasis was switched on by syphilis and switched off by testicular atrophy due to gonorrhoea.

There are 19 manifestations of syphilis given above, surely enough to establish the diagnosis

Study of the medical notes from St Helena revealed a disease due to recurrent infection of the ducts draining bile from the liver to the gallbladder (ascending cholangitis) usually caused by the passage of gallstones. The jaundice observed by two naval surgeons, their sacking, and its relevance to the endemic amoebiasis on St Helena (which may cause hepatitis but doesn't cause jaundice), illustrates the intense propaganda war being waged.

From 1800 until 1820 Napoleon's weight increased by about a kilo a year. From September 1820 until May 1821 he lost it at 2 kilos a month. This would indicate that he grew fat from overeating and lost weight when he ceased to eat as his stomach cancer developed and he lost his appetite. On April 25th he vomited altered blood and on May 3rd he passed a black tarry stool typical of internal bleeding from the stomach, subsequently passing several more. Napoleon Bonaparte died on St Helena on May 5th 1821 aged 51. A post-mortem examination was performed the next day.

The post-mortem found that the body was feminized and the testicles noticeably small; the physical cause for the absence of sexual desire and consequent chastity on St Helena. The stomach was discovered to be fixed to the liver by adhesions. While the liver texture was normal, most of the internal surface of the stomach was abnormal with the appearance of cancer, which had spread to the regional lymph nodes and those in the chest. The stomach, also smaller than normal, showed a perforation close to its lower end with an ulcer and contained altered blood. The urinary bladder was small and contained some gritty particles and the wall was diseased (thickwalled due to the urethral stricture). There were tubercles and cavities in the upper part of the right lung.

Napoleon's family had a history of such cancers. His father died of cancer of the stomach, which was diagnosed at post-mortem. There is some evidence his sister Pauline also succumbed, and it is reported that his son Leon Denuelle also died of the disease. Some authors claim yet more of his family were victim to the disease.

And so what of the suspicion of death-by-arsenic? The poisoning hypothesis has been considered critically and rejected. The crucial observations in this regard are that there was no clinical or post-mortem evidence of arsenical poisoning; the arsenic that founded the rumours was discovered not *in* the hair of the corpse (as would be the case if the poison had been ingested) but on its surface. The most likely explanation is that arsenic was often used in the preservation

of locks of hair given as keepsakes, and this is what accounts for the presence of arsenic in Napoleon's case.

In the final analysis, Napoleon died of a bleeding and perforated gastric cancer. He had pulmonary tuberculosis, and recurrent jaundice from ascending cholangitis. He had testicular atrophy due to a gonorrhoeal urethral stricture and tertiary neurosyphilis.

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Further reading

Hayden D. Pox: Genius, madness and the mysteries of syphilis, New York: Basic books

Medical texts The Oxford Textbook of Medicine, Bailey and Love's Short Practice of Surgery