

Insights on the history of tuberculosis: Novalis and the romantic idealization

Perceções da história da tuberculose: Novalis e a idealização romântica

Maria do Sameiro Barroso^{1,2a*}

Abstract Tuberculosis affected the world population since ancient times, being known to Hippocratic physicians. It was not completely understood and it was difficult to manage. From the eighteenth century onwards, it became highly devastating with a high sociological impact until Robert Koch (1843–1910) identified the pathogenic agent of tuberculosis, in 1882. His discovery enabled a progressive identification and control of infectious diseases. Novalis, born Georg Philipp Friedrich von Hardenberg (1772–1801), an early German Romantic poet, struck by the suffering and death of his fiancée, Sophie von Kühn (1782–1797), who died of a liver abscess as a complication of pulmonary tuberculosis, is a major founder of the romantic idealizing of the disease which lasted until the control of the endemic. Current medicine tends to identify the condition which struck Novalis as cystic fibrosis. However, his name will always be associated with the white plague, the feared

Resumo A tuberculose tem afetado a população mundial desde tempos antigos, sendo conhecida pelos médicos hipocráticos, não tendo sido, no entanto, completamente compreendida na sua complexa abordagem. A partir do século XVIII, tornou-se altamente devastadora, tendo produzido um grande impacto sociológico, até que Robert Koch (1843–1910), em 1882, identificou o seu agente patogénico. A sua descoberta permitiu uma progressiva identificação e controlo das doenças infecciosas. Novalis, pseudónimo de Georg Philipp Friedrich von Hardenberg (1772–1801), um dos primeiros representantes do romantismo alemão, foi marcado pelo sofrimento e morte de sua noiva, Sophie von Kühn (1782–1797), que morreu vitimada por um abscesso hepático que surgira como uma complicação de tuberculose pulmonar, é um dos principais fundadores da idealização romântica da doença que durou até ao controlo da endemia. A medicina atual tende a identificar a doença que atingiu Novalis

¹ Portuguese Medical Association, Department of History of Medicine, Lisbon, Portugal.

² CIAS — Centro de Investigação em Antropologia e Saúde, University of Coimbra, Portugal.

^a orcid.org/0000-0002-2860-7387

* Autor correspondente/Corresponding author: msameirobarroso@gmail.com



and ethereal disease that killed and inspired young artists and talented poets.

Keywords: Pulmonary tuberculosis; Novalis; romantic literature; social history of tuberculosis.

Introduction

In the nineteenth century, tuberculosis killed one in five Europeans, taking their victims slowly, racking their bodies and exhausting their minds, poorly unresponsive to therapies, challenging the medical practice. The role of hereditary, nutrition, environment and contagion were discussed, but most patients developed a disability requiring long-term medical care, and most did not recover. The old names of the disease, “phthisis” (a Greek word that means waste away) and consumption reflect the way the body is slowly destroyed and exhausted to death. It seemed to be a constitutional condition that passed from parents to children, destroying families over a generation or two. For most physicians it was understood as a “consumptive diathesis”, an inherited predisposition in which poor living conditions, a bad diet, and overwork would contribute to the onset of the disease (Barnett, 2014: 112).

In 1769, the British physician Percivall Pott (1714–1788) described a kind of pal-

como mucoviscidose (fibrose quística do pâncreas). O seu nome, no entanto, ficará sempre associado à peste branca, a temível e etérea doença que matou e inspirou jovens artistas e poetas geniais.

Palavras-chave: Tuberculose pulmonar; Novalis; romantismo; história social da tuberculose.

sy of the lower limbs associated with vertebral injuries, collapse, and crookedness of the trunk. The condition affected weak children and adults before forty years of age. It was associated with pulmonary tuberculosis (Pott, 1782).

In 1819, the French physician René Laennec (1781–1826), succeeded in having an insightful grasp on the involvement of other organs aside from the lungs and bone in tuberculosis:

*Si on réfléchit que le développement des tubercules dans le poumon paraît être ordinairement le résultat d'une diathèse générale, que souvent on en trouve en même temps dans les parois des intestins, où ils déterminent des ulcères, et, par une suite nécessaire, la diarrhée colliquative ; et que dans certains cas enfin les glandes lymphatiques, la prostate, les testicules, les muscles, les os, etc., en contiennent également.*¹ (Laennec, 1819: 106)

¹ Translation: If we note that the development of the tubercles in the lungs, ordinarily presumed to be the result of a general diathesis, is often found at the same time in the walls of the intestines, where they determine ulcers, and, as a consequence, of colicky diarrhoea; and, in some cases, finally the

Twenty years later, the German physician Johann Lukas Schönlein (1793–1864) finally gave the name tuberculosis to the condition (Barnett, 2014) since the lesions were called tubercles (from the Latin *tuberculum*, diminutive of *tuber*).

Pulmonary tuberculosis usually presents cough, frequently productive, mucopurulent or purulent sputum, haemoptysis (not always a feature, volume variable), breathlessness (gradual increase rather than sudden), gradual weight loss, anorexia, fever (may be associated with night sweats), malaise, and wasting and terminal cachexia. But they are not specific. They may be present in other diseases such as lung cancer. The diagnosis must be confirmed by direct examination of sputum and culture to identify the *Mycobacterium tuberculosis* (Campbell and Bah-Sow, 2006).

The discovery of this specific microbe was announced in London, during the Seventh International Medical Congress in 1881, by the German doctor and pathologist Robert Koch (1843–1910). Koch had already identified the aetiology of anthrax, a primary disease of sheep and cattle, as the *Bacillus anthracis*, that in humans caused severe, localized skin ulcers, known as malignant pustules, a dangerous condition known as gastric anthrax, and pneumonia, known as woolsorter's disease. Based on his work with anthrax, Koch believed that bacte-

riological science would lead to control over infectious diseases, what happened later (Magner, 1992).

Tuberculosis in Ancient History

The precise history of tuberculosis in ancient times is difficult to track. According to the Croatian-French historian of medicine Mirko Grmek (1924–2000):

For its clinical nosology, tuberculosis is not, strictly speaking, a disease, since it has no symptomatic homogeneity. Because it is defined exclusively by its aetiology, tuberculosis includes a number of diseases that differ among themselves in the place affected, the symptoms, and the seriousness of the prognosis. Aside from the specific microbe, the tuberculous disease also has in common the histological appearance of the fundamental lesion, namely the tubercle and the caseous destruction of cellular structures. (Grmek, 1991: 177)

The caseous degeneration often ending in local destruction (cavities) and the general poisoning of the organism by the metabolic products of the organism result in consumption, fever, fatigue, cough and blood-spitting. The preference of the disease for the lungs may be explained by high oxygen content and due to the transmission of the Koch's bacilli by the air during the breath. The evolution of the lesion depends on the

lymphatic glands, the prostate, testicles, muscles, bones, etc., also contain it.

immune resistance of the patient. The intestines and mesenteric lymph nodes are typically infected when bacilli are ingested orally in large amounts of contaminated milk. Other localizations may involve the lymph nodes of the neck (scrofula), the genito-urinary organs, the meninges, the bones, joints, and skin.

Tuberculosis can affect the cranial vault. The most common skeletal form is the tuberculous spondylodiscitis with the destruction of the adjacent vertebral bodies, known as Pott's disease. The caseous destruction can lead to paravertebral abscesses that extend downwards, burrowing under the sheath of the psoas major muscle. The collapse of vertebral bodies produces a sharp hump (angular kyphosis).

The diagnosis of tuberculosis is quite simple through anatomopathological observation on a microscopic examination of fresh tissue. Although indicated by pathognomonic lesions, the diagnosis of dry and petrified bones may be confused with other bone conditions such as trauma, congenital malformations, and pyogenic osteomyelitis. When dealing with iconographic material, the primary indicator is the presence of an angular hump (Grmek, 1991).

Pott's disease, also known as tuberculous spondylitis, is the earliest known form of tuberculosis and one of the oldest diseases of humankind to which we came across through anthropological remains (skeletons) since the Neolithic (Figure 1). It was identified in mummies

of ancient Egypt dating from 3400 BC and in later periods, in Europe, the Pacific coast, and South America (Grmek, 1991: 177–178). Ancient Egypt provides excellent data on Pott's disease in mummies, such as a mummy from the 21st Dynasty (around 1000 BC) (Smith et al., 1910) (Figure 2). Ancient Egyptian mummies also provide excellent data on paravertebral caseous abscesses (Figure 3).

Phthisis and consumption in Greek-Roman time

According to Grmek, tuberculosis existed since pre-history in Greek territory but osteological remains to prove it are lacking. The representation of hunch backs is common in the art of later periods. Literary sources give notice of pulmonary, osseous and glandular tuberculosis in the Greek city-states during the classical age. There is evidence of the epidemic worsening during the Hellenistic and Roman periods. Although the Greek word for tuberculosis "Phthísis", meaning a state of diminishing or withering, is applied to other chronic disabling conditions, a good part of Hippocratic physicians had found the essential traits of the clinical features of pulmonary consumption (Grmek, 1991: 183). A Hippocratic text on the condition is quite insightful:

When there is disease of the lung, thick sweet yellow-green sputum is coughed up, the teeth chatter, and pain occupies the chest and

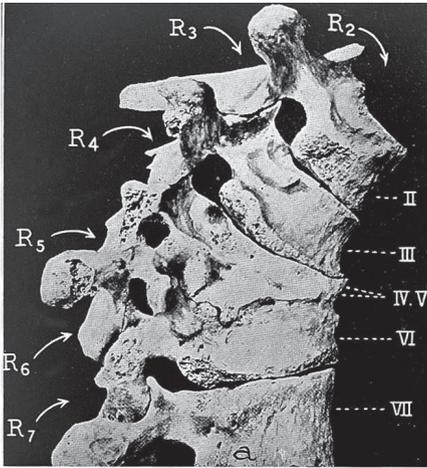


Figure 1. Pott disease from the Neolithic. Credit: Wellcome Image Collection. CC-BY.

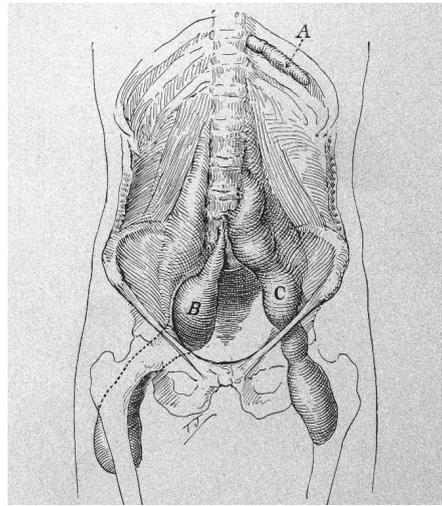


Figure 3. Diagram showing three types of abscesses due to vertebral tuberculosis in Egyptian mummies. Credit: Wellcome Image Collection. CC-BY.

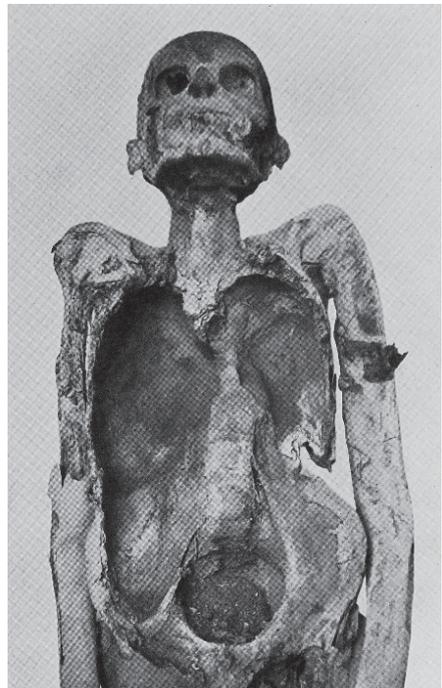


Figure 2. Mummy and model with Pott's disease. Credit: Wellcome Image Collection. CC-BY.

back; the throat whistles quietly and becomes stiff, the areas under the eyes become red, and the voice deep; the feet swell up, and the nails become curved; these patients become very thin, and the upper parts of their bodies are wasted. The patient is disgusted by the sputum when it is in his mouth after being coughed up; he coughs most early in the morning and in the middle of the night, although he coughs at other times too. This disease is more frequent in younger women than in older ones. (Hippocrates in Potter, 1988: 277)

Hippocrates thought it was hereditary, that a consumptive patient would have a consumptive child (Hippocrates in Jones, 1923: 151). Greek physicians also heard abnormal respiratory sounds by applying the ear directly to the patient's chest. Centuries later, the French physician, René-Théophile-Hyacinthe (1781-1826), one of the most outstanding researchers on tuberculosis and the inventor of the stethoscope, resumed Hippocratic thoracic sounds: crackles, pleural rubs, etc., and found succussion (by shaking the patient by the shoulders and listening to the evoked sounds) useful to detect the accumulation of fluid within the chest (Laennec, 1819: 525).

Hippocratic physicians drained pulmonary suppuration following pneumonia. It was a very bold and risky procedure for the time. The patient could not

survive. However, he would surely die if the drainage was not attempted:

First, cut the skin between the ribs with a bellied scalpel; then wrap a lancet with a piece of cloth, leaving the point of the blade exposed to the nail of your thumb, and insert it. When you have removed as much pus as you think appropriate, plug the wound with a tent of raw linen, and tie it with a cord; draw off pus once a day; on the tenth day, draw all the pus, and plug the wound with linen. Then make an infusion of warm wine and oil with a tube, in order that the lung, accustomed to being soaked with pus, will not be suddenly dried out; discharge the morning infusion towards evening, and the evening one in the morning. When the pus is thin like water, sticky when touched with a finger, and a small amount, insert a hollow tin drainage tube. When the cavity is completely dried out, cut off the tube little by little, and let the ulcer unite before you remove the tube. A sign whether the patient is going to escape: if the pus is white and clean and contains streaks of blood, he generally recovers; but if it flows out on the first day yolk-coloured, or on the following day thick, slightly yellow-green, and stinking, when it has flowed out, the patient dies. (Hippocrates in Potter, 1988: 275)

The bellied scalped figures in a relief from the temple of Asclepius in Athens are shown in Figure 4 (second from left

to right). A similar procedure was indicated to treat suppurations arising from wounds, pneumonia, and massive defluxions, and when a lung falls against the side (Hippocrates in Potter, 1988: 55–57). Massive defluxion possibly corresponds to tuberculous empyema.

The Roman encyclopaedist Aulus Cornelius Celsus (26 BC–50 AD) described the wasting diseases which correspond to different forms of tuberculosis. He refers to the age of appearance, from eighteenth to thirty-five years of age, and he recommends keeping away from business and from everything that disturbs him from business, indulging in sleep, and a sea voyage if the patient was

not too weak (Celsus, 1935: 327–329). These recommendations were continued with the construction of seaside sanatorium for the treatment of tuberculosis in the late eighteenth century.

Scrofula and consumption from the Middle Ages to the seventeenth century

Scrofula (literally meaning little pigs), tuberculosis of the lymph glands of the neck, was recognized by the physicians of the School of Salerno and Montpellier, the leading medical schools of the early Middle Ages, as a manifestation of a general disease of very unfavourable prognosis (Dormandy, 1999: 4). Scrofula can sup-



Figure 4. Marble relief from the Athens Asklepieion, second century AD. Reproduced from Milne (1907) Plate V.

purate and ulcerate; by that time it was known as the “King’s Evil”. It is recorded in medieval iconography, especially related to its cure by the Royal touch (Figure 5). The belief in the cure of scrofula by the Royal touch dates back to Clovis, King of France (487–511). It was common after the thirteenth century and lasted until the seventeenth century, and it was performed by English and French monarchs (Frith, 2014: 29–35).



Figure 5. Mary I, Queen of England (1516–1558) touching the neck of a boy for the King’s evil (scrofula). Watercolour by M.S. Laphorn, 1911, after a watercolour from the 16th century. Credit: Wellcome Image Collection. CC-BY.

There is evidence that scrofula has surgical treatment. An Anglo-Norman manuscript from the mid-thirteenth century

displays an illustration of a physician dealing with a problematic case of scrofula that seems to be growing on the scalp or on the cranium itself (Hunt, 1992: 38–39). Cordials made of vegetable, mineral and, less usually, animal ingredients were the leading medical treatment. A French manuscript of the *Antidotaire Nicolai* from the fourteenth century, supposedly authored by the Salernitan physician Nicholaus Praepositum gives several recipes of electuaries for *la tisque* (the phthisis). One of them is reproduced in Figure 6a (Dorveaux, 1896: 12).

In this recipe, camphor stands out for its use in the relief of respiratory conditions. However, now we know that the internal use of camphor is dangerous because safrole, an important component of its essential oil, is carcinogenic (Cunha et al., 2012: 196). *Cinnamomum camphora* L. is a plant of the Lauraceae family of Asiatic origin (Figure 6b). Its oil, containing camphor and safrole, is used in the preparation of expensive perfumes. Camphor is extensively used in medicine (Figure 6c). In a solution of wine, it is a folk medicine, used as a liniment as a counterirritant in the treatment of muscular strains, gout, rheumatic conditions, inflammations, in relieving itching skin. It is a mild antiseptic. It is widely indicated in respiratory conditions. In small doses, it stimulates respiration: employed for asthma, bronchitis, emphysema, lung congestion, and rhinitis (Figure 6c). It was also widely used as an analeptic in cardiac depression (Duke, 1985: 125).

Pulmonary tuberculosis does not seem to have played a particular role during the Middle Ages. Leprosy and pest were the devastating diseases of the time. In the sixteenth and seventeenth centuries, monarchs and nobles of the Bour-

bon and Valois dynasties were struck by the condition, making it more visible. In the seventeenth century, the number of people caught by the disease was higher. Artists and their families were also struck, such as the Dutch painter Rembrandt van

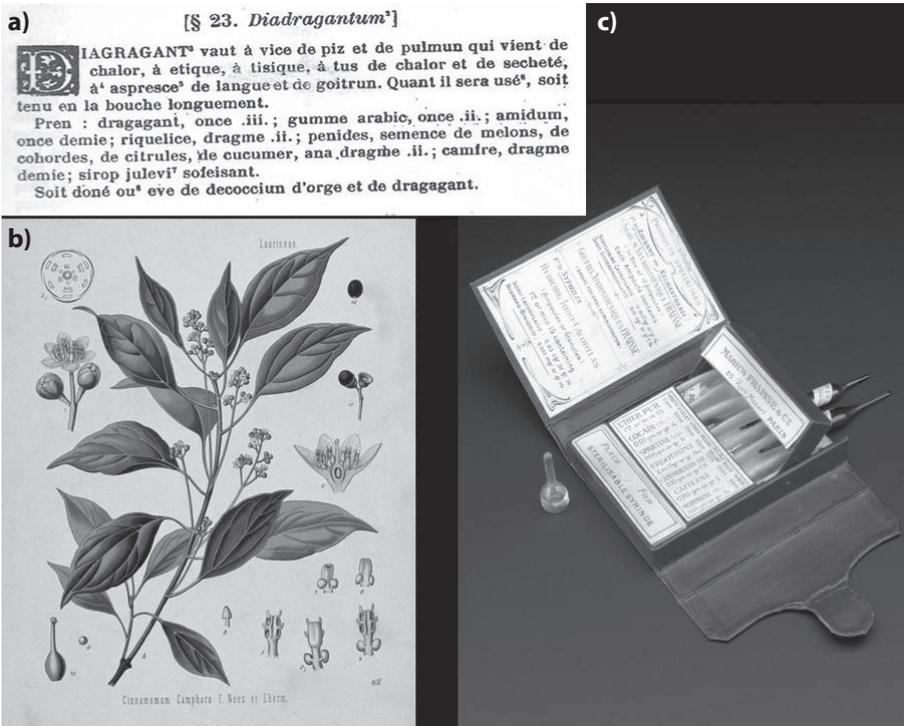


Figure 6a. Recipe of the *Antidotaire Nicolas*. Reproduced from *Lantidotaire Nicolas*, 1896:12.

Figure 6b. Camphor tree (*Cinnamum camphora*: flowering branch and segments. Chromolithograph, c. 1887, after W. Müller. Credit: Wellcome Collection. CC-BY.

Figure 6c. First aid kit, Paris France, 1901–1910. This first aid kit contains a number of ampoules filled with liquid. Each coloured glass corresponds to a different liquid so they were easy to identify in an emergency. The blue glass contains caffeine, which was believed to relieve pain. The white glass contains ether, a popular anaesthetic. “Ergotine” in the yellow ampoule was used to control heavy bleeding. The camphorated oil was used to help soothe bruises, aches and pains. All the liquids were to be given by injection. Unfortunately, the syringe is missing, along with the purple ampoule of cocaine used as a local anaesthetic. Maker: Unknown. Place made: Paris, Ville de Paris, Île-de-France, France. Credit: Science Museum, London. CC-BY.

Rijn (1606–1669). The mother of his wife Saskia had already died of tuberculosis. The three children of Saskia and Rembrandt died shortly after delivery, and Saskia was also caught by tuberculosis when she was pregnant of her fourth child.

Jean Baptiste Poquelin (Molière) (1622–1673) was also a victim of tuberculosis. He was infected when he was an ambulant actor. Short after King Louis XIV hired him to the Versailles palace, he had abundant haemoptysis. He struggled against the disease and also against the physicians of the University of Paris who just rushed to treat him by bleedings and enemas that only made his condition even worse. No wonder that he portrayed them as ignorant in his play “The imaginary invalid”. The physicians of his time were helpless in the management of the disease. Molière died soon after a severe coughing attack while performing the leading role of the play (Moser, 2018: 29–31).

The French Baroque painter Jean-Antoine Watteau (1684–1721), also victimized by tuberculosis, wrote on the creative euphoria of the consumptive. Baroque was also a decaying time. He also talked about a kind of sensibility of people dying from consumption longing to last beyond death with cheerful red on cheeks either from make-up or from hectic fever (Friedell, 2008: 565).

From the eighteenth century onwards, new concepts on the disease emerged, boosted by the Romantic move-

ment. The time of the Romantic fever was beginning. Tuberculous consumption seemed to carry with it a creative power, stimulating art and literature. Its endemic character made of it a mysterious individual disease, a deadly arrow that could hit anyone, regardless of the social class. It seemed to intensify life and feelings. The fever seemed to give wings to thoughts and creativeness. It ennobled and refined the mind and the spirit, and it was the disease of genial artists, poets, and lovers. The body suffered no shameful mark, like in syphilis. Instead, it was a painless, elusive, clean, and purifying condition that seemed to be a gift of destiny, refinement, and genius (Moser, 2018: 12–14).

Novalis

Novalis, pen name of Georg Philipp Friedrich von Hardenberg (1772–1801) (Figure 7), one of the most disturbing and inspiring poets of all time, born of an aristocratic family of Saxony, in northern Germany, was a philosopher, mystic, and scientist (mineralogist), belonging to the first generation of the German Romanticism. His life and thinking were inextricably associated with pulmonary tuberculosis.

He was born on the 2nd May 1772, at the castle of Oberwiederstet, son to Heinrich Ulrich Erasmus Freiherr (Baron) von Hardenberg (1738–1814) and his second wife, Auguste Bernardine, born Von Bölzig (1749–1818). Novalis was the second brother of twelve children and had a very

religious education. His father was a Lutheran pietist. He was a frail and sick child, not standing out from the other brothers as a little child. In 1780, he was seriously ill. He caught dysentery, followed by stomach atony, requiring a long treatment of strong and painful stimulants. However, the disease seemed to wake up his mind. Suddenly his spirit developed extraordinarily (Schulz, 1969: 8–14).



Figure 7. Novalis, portrait by Franz Gareis around 1799. Image in public domain.

The illness and long convalescence had provided him a long reflection and positive insights of disease as a determinant factor for self-discovery and inner growing.

After the gymnasium, on the 23rd October 1790, Novalis enrolled in the University of Jena as a Law student. In Jena, he met Friedrich Schiller (1759–1805), a leading figure of German Clas-

sicism, and, by that time, a professor of History at the University. He was very impressed with Schiller's personality. He was his first great influence. Schiller became his model as a man who had been able to face an unfavourable destiny bringing together inner harmony, morality, and beauty (Schulz, 1969: 32).

Novalis also had the feeling of having a peculiar and challenging destiny, expressed in the poem "Laments of the young man" (*Klagen des Jünglings*), his first published poem in the literary magazine *Neue Teuscher Merkur*, edited by the poet Christoph Martin Wieland, in 1791: *Powerless I feel facing the destiny/To unmanly enjoyment damne [Kraftlos fühl ich mich von dem Gesckicke/Zum unmännlichem Genuß verdammt]* (Schulz, 1969: 28–29).

The poem already points to the main lines of his thought and poetry, characterized by a magical idealism, centred on the search for the primordial, the ancestral truth, and the innocence of the world. For Novalis, life was learning, and poetry was a revelation leading to absolute fulfilling.

Novalis was acquainted with the other great figures of the literature of the time. He kept a long-lasting friendship with Friedrich Schlegel (1772–1829), also a poet of the early German Romanticism. The correspondence that they maintained is a beneficial source for his biography.

Novalis stayed in Jena for just for one year. In 1791, he enrolled in Law, Mathematics, and Philosophy at the Uni-

versity of Leipzig. In 1792, he had a love affair with Juliane Eisenstück that ended because her father opposed to their relationship. In 1794, refusing to follow the military career proposed by his father, he enrolled in Law, at the University of Wittenberg. He was not robust, he was weak and fragile and in his letters, he often expressed the fear of getting sick; nevertheless he was a prodigious being. On June 14, 1794, he took the final examination. In December, he was appointed Assistant to the Weißenfels Salt Work (Schulz, 1969: 32–41). He was longing for real life. By that time, his brilliance stood out. He could read a book in a quarter of the time required by others, and months later he would be able to discuss its points (Birch, 1903: 20–21).

Sophie von Kühn

On the 17th November 1794, Novalis, going to Grüningen on business to visit the old castle of the von Kühn, met a young lady from an aristocratic family Christiane Wilhelmine Sophie von Kühn (born 17, 1782 — died March 19, 1797) (Figure 8) and fell in love with her. Grüningen became his paradise on earth (Birch, 1903: 20-21).

He was twenty-two years old and Sophie was only twelve. They became secretly engaged in March 1795 (Birch, 1903: 25). Sophie was a thirteen-year-old teenager with a poorly developed body. Her letters do not reveal a particular in-

telligence (Schlaf, 1906: 16) and sometimes it is not easy to understand what Sophie meant to Novalis. He also would have questioned himself. A mixture of childish naturalness, naivety, and, on the other hand, an emotional maturity he acquired with illness, seems to be at the heart of the attraction. They always kept a certain distance. After the engagement, they addressed each other by the second-person plural.



Figure 8. Portrait of Christiane Wilhelmine Sophie von Kühn (* 17 März 1782, † 19 März 1797). Unknown author. Late eighteenth century. Image in public domain.

Novalis thought of an ideal woman, like Höderlin in Diotima or Friedrich Schlegel in Lucinda, but these were much older (Schulz, 1969: 52–53). Sophie was afraid of spiders, rats, and marriage; she liked to drink wine and smoke tobacco. She liked to see everybody happy. How-

ever, his love scared her. Novalis wrote on his diary: “She does not want to be anything. She is already something”. He appreciated her qualities and praised women in general:

Her keen observation. Her real tact. All women have what Schlegel blames in the beautiful soul. They are more perfect than us. Freer than we. Generally, we are better. They recognize better than us. Their nature seems to be our art—our nature their art. They are born actresses. They individualize—we universalize. She believes in no future life but in the wandering of the soul. (Birch, 1903: 22–23)

Novalis had dreamt of marriage, on the wedding night, and the pleasures of physical love as he expressed in a letter to Schlegel. He had imagined living together with his muse (Pretz, 1957: 53). Sophie should give him what he lacked.

In 1795, he began studies in Philosophy. In November, Sophie became seriously ill. In a letter to his brother Erasmus (Heinrich Ulrich Erasmus von Hardenberg [1738–1814]), on 20 November, Novalis wrote that her liver was very inflamed, that Sophie had severe pains, the fever and that she had not slept for days. She had been bled twice and could not move, but she was still and calm. Her condition stayed like that for some time, but it improved (Kluckhohn and Samuel, n.d.: 121).

In the Summer of 1796, she got worse again. She was taken to Jena and

was assisted by Dr Johann Christian Stark (1735–1811), physician of Friedrich Schiller (1759–1805) also presumably suffering from tuberculosis. Stark and two other physicians operated her on the liver. It was possibly a sinking (sub-phrenic) abscess, related to pulmonary tuberculosis. The surgical wound oozed heavily. The dressing had to be changed daily, causing great suffering to Sophie. However, Dr Stark assured that the wound would heal. At the end of August, Sophie was operated again, and shortly after that a third intervention was required (Schulz, 1969: 58–59).

Despite all the suffering - Sophie had been operated with no anaesthesia - she kept her spirits and her composure. Novalis wrote that he had loved her even more since she had fallen ill. In September, her condition ameliorated slightly. Sophie went back to Grüningen. According to the physician who assisted her, the wound healed on the outside but not in-depth. At the beginning of February 1797, the wound worsened considerably and reopened, with intense suppuration that caused unbearable pain to Sophie. The fever was high. The wound was drained by Dr Blöda with a catheter. The situation improved but it worsened again in early March. On the 19th March, two days after her birthday, Sophie died. She was fifteen-years-old. The cause of death in the book of the Church of Grüningen refers to complications of pulmonary tuberculosis (Schulz, 1969: 60–62).

The hepatic abscess was already known by Hippocrates. When mature, it was treated by surgical incision. The prognosis was established according to the quality of the pus. If the drained pus was malodorous or dark, the prognosis was invariably fatal until 1938, when Oschner and co-authors reported a 62% survival rate. The favourable outcome improved later with antibiotic management (Contis and Voros 2006: 487–505).

Sophie figures as Novalis' fiancée in her funerary plate (Figure 9). Her long-suffering, braveness and final death were a deep shock for him. Novalis was heart-broken. In his own words: "Everything seemed to be dead, devastated, dumb, motionless, and petrified" (Schulz, 1969: 63). "She is dead; so I will die", wrote Novalis (Birch, 1903: 29).

On April 14, less than a month after Sophie's death, Erasmus, his favourite brother, also died after long-suffering. The diagnosis was also tuberculosis (Pretiz, 1957: 78). On May 28, visiting Sophie's tomb, he felt incredible happiness. On the 36th day after her death, he wrote:

In the evening I went to Sophie; there I was unutterably joyful — kindling moment of enthusiasm — I blew the grave as it had been dust before me. Centuries were as moments — I could feel her near. (Novalis in Birch, 1903: 29)

In that year, he wrote the work "Blütenstaub" (Flower pollen) and adopted the name Novalis as a literary pseudonym.

The reason for the choice of the name has been discussed. Novalis was a family name, and it was also the name of a medieval knight. Novalis seems to have adopted as a sign of being a novice after the experience of death (Pretiz, 1975: 114, 200).



Figure 9. Sophie's funerary plate at the Grüningen church with the following lettering: Auf diesem Gottesacker Ruht Sophie von Kühn* 17. März 1782 † 19. März 1797 auf Schloß Grüningen die Braut des Dichters Friedrich von Hardenberg <NOVALIS> (On this graveyard lies Sophie von Kühn * March 17, 1782, † March 19, 1797, at the castle Grüningen the bride of the poet Friedrich von Hardenberg <NOVALIS>) Credit. CC-BY-SA-3.0 Image in public domain.

His relationship with Sophie had transformed him profoundly. Hardenberg means a hard mountain, which Novalis transposed, giving place to a new personality. In his work "Flower pollen", he completely freed himself from rhe-

torical formalities and from the rigidity of the rhyme. His poetry had been liberated in prose texts in which his brilliant reflections, thoughts and intuitions flowed.

Novalis illness

In a letter to Schlegel, on the 5th September 1797, Novalis complained that he had little activity, he was not feeling well, he was really sick (Pretz, 1957: 103). However he recovered his activity. Although he had decided to follow Sophie in death, his life continued. In 1798, he went to Leipzig to study Mineralogy and Chemistry. He was hosted in the house of the von Charpentier, an aristocratic family.

Half a year after Sophie's death, he was again secretly engaged with Julie von Charpentier (1778–1811), the daughter of the host, Johann Friedrich von Charpentier (1738–1805), professor and director of the mines. Julie was twenty years old; he wrote enthusiastically about her (Birch, 1901: 31).

At the beginning of the summer of 1798, shortly after the death of Jeanette Danscour, Sophie's French housekeeper, Novalis was severely ill. He went to the springs of Tepliz for treatment. He wrote to his father saying that he was feeling very week. Pulmonary tuberculosis had been diagnosed. After that, he often referred to this weakness and illness. Thoughts and reflections on disease often came to his mind. In August, his brother Charles referred that Novalis had had blood-split-

ting. Later he had abundant haemoptysis (Schulz, 1969: 156–169).

In 1799, he wrote the work "The Disciples in Saïs" (Die Lehrlinge zu Saïs), a philosophic and initiatory work. At the beginning of December, he began to write the novel "Heinrich von Ofterdingen", in two parts, the second of which left incomplete. In 1800, he published "Hymns to the Night" (Hymnen an die Nacht), the only work that he left complete, dedicated to Sophie, whom he had never forgotten. It is a founding work of Romanticism.

In the year 1800, his health got worse, he was very frail. However, he was not aware that he was approaching death, and he had insightful, poetic ideas. On the 25th March, his brother Charles wrote in his diary that Novalis had slept poorly and, at eight o'clock, the physician came and said that his end might be near. At 1:21 p.m., he died quietly (Schulz, 1969: 161–162). Novalis was following his beloved Sophie. Tuberculosis and death united them forever, as well as love lived as an initiation to wisdom, which the name of the beloved bride heralded ("Sophie": Greek word for wisdom).

Hymn to Night

[...]

Thou comest Beloved!

Night is here.

Delighted is my soul,

The earthly road is passed

And Thou once more art mine.

*I gaze into thy deep dark eyes,
I see nought but love and blessedness.
We sink on the Altar of Night,
On the soft couch.
The mantle descends,
And kindled by the warm embrace
The sweet sacrifice
Is illumined in clear
Flame.*

(Novalis, 1903: 67)

The disease and cause of death of Novalis were recently revised. Symptoms: weakness, frequent respiratory infections, and haemoptysis tend to be identified with mucoviscidosis, a disease unknown at the time. The genetic character of the disease is evident in the death of his brother Erasmus and other siblings who died young with similar pathologies (Danzer, 2011: 462-486). Their names figure on the Hardenberg's family funerary monument (Figure 10).

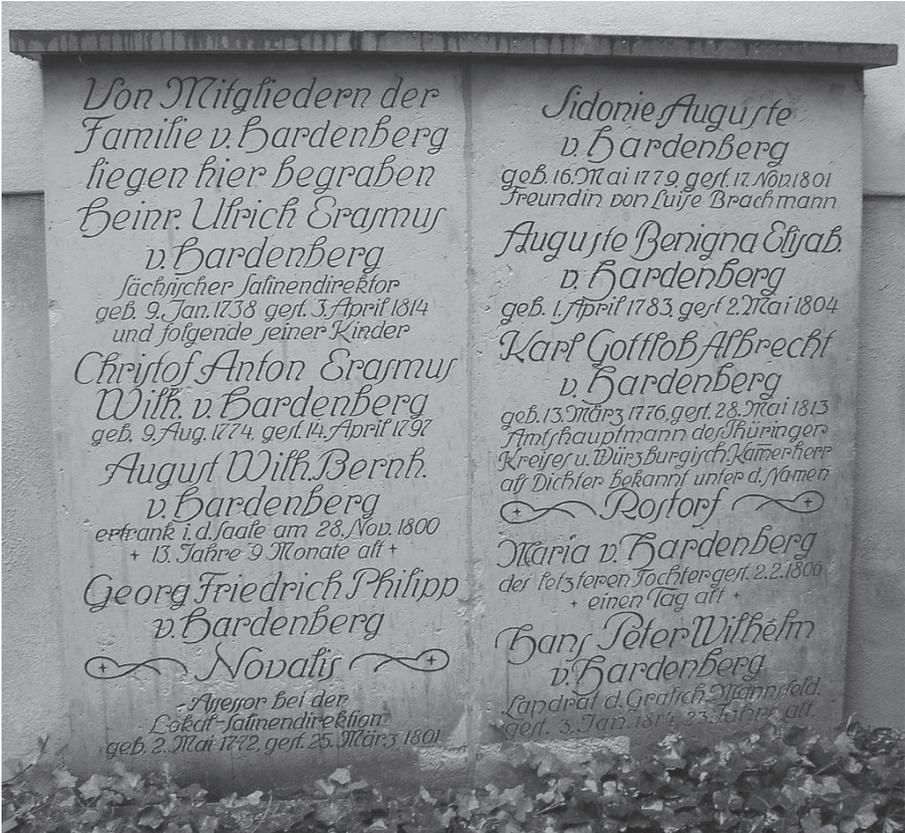


Figure 10. Novalis' grab in Weißenfels (Saxony). Photo taken by Doris Anthony, Berlin. GFDL and CC-BY-SA-2.5 Image in the public domain.

Medical insights and the romantic idealization of pulmonary tuberculosis

Novalis devised a poetization and romanticization of the world, trying to bring together poetry and science. Although he was no physician, he had insightful thoughts of health and disease (Danzer, 2011: 469). He got into the depth of things, seems to penetrate into the everlasting essences of the world when he says: “The nature of the disease is as dark as the essence of life” (Das Wesen der Krankheit is so Dunkel als das Wesen des Lebens) (Novalis in Chafes, 1992: 78).

He sensed the futility of seeking perfect health: “The ideal of perfect health is merely interesting. The disease is part of individualization” (Das Ideal einer vollkommenen Gesundheit ist bloßwissenschaftlich interessant. Krankheit gehört zur individualisierung) (Novalis in Chafes, 1992: 34).

He was very critical regards medications: “There are no real medicaments — all remedies are *harmful* because they are really *effective*” (Echte Gesundheitsmittel gibts nicht — alle Mittel sind, weil sie überhaupt *wirksam* sind, *schädlich*) (Novalis in Chafes, 1992: 86).

In his view, death was the colourful complement of life. (“Death is the romanticizing principle of our life. Death is — life +. Death increases life”) (Der Tod ist das romantisierende Prinzip unsers Lebens. Der Tod ist —, das Leben+. Durch den Tod wird das Leben verstärkt) (Novalis in Chafes, 1992: 116).

It was as a way of escaping from trivial life: “Death makes common life so poetic” (Der Tod macht das gemeine Leben so poetisch) (Novalis in Balmes, 2015: 484).

Tuberculosis, of which he died, was the perfect disease for this bird of paradise:

Novalis is such a beautiful dreamer that when we come to analyze his work we feel as if we were bruising the wings of some glorious blue butterfly, whose life has been a series of flights from mystery to mystery, and whose true home is the empyrean, the real Bird of Paradise, of which it is said that it has no feet, and so must hang hovering forever. (Birch, 1903: 48)

Conclusion

In the eighteenth and nineteenth century, in literature and art, tuberculosis was frequently idealized as ethereal muse, white reaper, cruel or redemptive goddess. Novalis, a young aristocrat, and brilliant poet, who projected in death the consummation of his love with Sophie, was a founding contributor to the mythical idealization of the disease that united and victimized them: Tuberculosis. Ironically, as recently assessed, the diagnosis may not be confirmed. Other personalities of art and literature also revealed that the diagnosis of tuberculosis encompassed many other diseases, unknown at the time. However, Novalis remains a hallmark in the romantic idealization of the disease.

References

- Balmes, H. J. 2015. *Novalis: Gesammelte Werke*. Frankfurt am Main, Fischer Verlag.
- Barnett, R. 2014. *The sick rose or disease and the art of medical illustration*. London, Thames & Hudson.
- Birch, U. 1903. *Novalis: the disciples at saïs and other fragments*. London, Methuen & Co.
- Campbell, A.; Bah-Sow, O. 2006. Pulmonary tuberculosis: diagnosis and treatment. *British Journal of Medicine*, 332(7551): 1194–1197. DOI: 10.1136/bmj.332.7551.1194.
- Celsus, A. C. 1934. *On Medicine* (Loeb edition). Cambridge, Harvard University Press.
- Chafes, R. 1992. *Fragmentos de Novalis*. Lisboa, Assírio & Alvim.
- Contis J.; Voros D. 2006. Hepatic abscess. In: Karaliotas, C. C.; Broelsch, C. E.; Habib, N. A. (eds.). *Liver and biliary tract surgery*. Vienna, Springer: 487–505.
- Cunha, P. A. da; Silva, A. P. da; Roque, O. R. 2012. *Plantas e produtos vegetais em Fitoterapia*. Lisboa, Fundação Calouste Gulbenkian.
- Danzer, G. 2011. "Heinrich Schipperges". In: *Wer sind wir? Anthropologie im 20th Jahrhundert. Ideen und Theorien für die Formel des Menschen*. Heidelberg, Springer Verlag: 461–473.
- Dormandy, T. 1999. *The white death: a history of tuberculosis*. London, The Hambledon Press.
- Dorveaux, P. 1896. *L'antidotaire Nicolas: deux traductions Françaises de L'Antidotarium Nicolai*. Paris, H. Welter. Available at: <https://archive.org/details/lantidotairenic00dorvgoog/page/n9>.
- Duke, J. A. 1985. *CRC handbook of medicinal herbs*. Boca Raton, CRC Press.
- Grmek, M. D. 1991. *Diseases in the ancient Greek World*. Baltimore, The John Hopkins University Press.
- Friedell, E. 2018. *Kulturgeschichte der Neuzeit. Die Krisis der europäischen Seele von der Schwarzen Pest bis zum Ersten Weltkrieg*. München, C. H. Beck.
- Frith, J. 2014. History of tuberculosis. Part I — Phthisis, consumption and the White Plague. *Journal of Military and Veterans' Health*, 22(2): 29–35. Available at: <https://jmvh.org/article/history-of-tuberculosis-part-1-phthisis-consumption-and-the-white-plague>.
- Hunt, T. 1992. *The Medieval surgery*. Woodbridge, The Boydell Press.
- Kluckhohn, P.; Samuel, R. H. (eds.). n.d. *Novalis Schriften: die Werke von Friedrich von Hardenbergs*. Leipzig, Kohlhammer Verlag.
- Jones, W. H. S. 1923. *Hippocrates* (Loeb edition) Volume II. Cambridge, Harvard University Press.
- Laennec, R. T. H. 1819. *De l'auscultation médiate ou traité du diagnostic des maladies des poumons et du coeur, fondé principalement sur ce nouveau moyen d'exploration*. Paris, J.-A. Brosson et J. S. Chaudé Librairie. Available at: <https://gallica.bnf.fr/ark:/12148/bpt6k1065314f/f158.image.texteImage>.
- Magner, L. N. 1992. *A history of medicine*. New York, Marcel Dekker.
- Milne, J. S. 1907. *Surgical instruments in Greek and Roman times*. Oxford, Clarendon Press.
- Moser, U. 2018. *Schwindsucht: eine andere deutsche Gesellschaftsgeschichte*. Berlin, Matthes & Seitz.
- Novalis. 1903. "Hymn to Night". In: *The disciples at Saïs and other fragments*, Lon-

- don, Methuen & Co: 63–67. Available at: <https://archive.org/details/disciple-satsais00nova/page/62>.
- Pott, P. 1782. *Further remarks on the useless state of the lower limbs, in consequence of a curvature of the spine: being a supplement to a former treatise on that subject*. London, J. Johnson. Available at: <https://archive.org/details/fartherremarkson-00pott/page/n9>.
- Potter, P. 1988. *Hippocrates* (Loeb edition), Volume V. Cambridge, Harvard University Press.
- Preitz, M. 1957. *Friedrich Schlegel und Novalis. Biographie einer Romantikerfreundschaft in ihren Briefen*. Darmstadt, Hermann Genter Verlag.
- Schlaf, J. 1906. *Novalis und Sophie von Kühn. Eine psychophysiologische Studie*. München, Verlegt bei E. W. Bonsels. Available at: <https://archive.org/details/novalisundso-00schluoft/page/n6>.
- Schulz, G. 1969. *Novalis in Selbstzeugnissen und Bilddokumenten*. Hamburg, Rowohlt.
- Smith, G. E.; Ruffer, M. A.; Sudhoff, K. 1910. "Pott'sche Krankheit an einer Ägyptischen Mumie aus der Zeit der 21. Dynastie (um 1000 v. Chr.)". In: Sudhoff, K. and G. Sticker (eds.). *Zur historischen Biologie der Krankheitserreger*, Heft 3. Gießen, Alfred Töpelmann.