

The “torpillage” neurologists of World War I

Electric therapy to send hysterics back to the front

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ABSTRACT

The French neurologists and psychiatrists who were mobilized during the Great War were confronted with numerous soldiers with war neuroses, often with novel clinical manifestations such as campyocormia. They addressed hysteria and pithiatism according to concepts that had been formed before the war, and many doctors considered these soldiers to be malingerers. As a result, the use of aggressive therapies to enable their prompt return to the battlefield was advocated. In 1915–1916, Clovis Vincent (1879–1947) developed a method called torpillage, a “persuasive” form of psychotherapy using faradic and galvanic electric currents, to treat soldiers with “intractable” neuroses. However, since the treatment was painful, soldiers began to refuse it and, following a publicized trial, the method was discontinued. Given the influx of soldiers with seemingly incurable neuroses, Gustave Roussy (1874–1948) made an attempt in 1917 to develop a new method of psychoelectric treatment. In January 1918, he too came up against soldiers refusing electric treatment. Following a new trial and an unfavorable press campaign, the psycho-faradic method gradually died out. These extreme medical practices developed to treat psychological trauma during the First World War subsequently led to the delineation of posttraumatic stress disorder in more recent wars. *Neurology*® 2010;75:279–283

From the beginning of World War I (WWI), the protagonists of French neuropsychiatry were mobilized in military neurologic and psychiatric centers. The neuropsychiatric community largely focused its efforts on war pathology. Among the different conditions, the attention afforded to war-related psychological disorders rapidly increased. These disorders were not well known before WWI, despite the fact that certain cases had been reported during the American Civil War and other previous European conflicts.^{1,2} During WWI, these disorders were referred to as war psychoneuroses, and often presented unseen clinical features such as campyocormia (bent trunk) or functional deaf-mutism.

Military doctors had differing opinions on the nature of these disorders, some attributing them to nervous system lesions, others viewing them as psychological disorders, but many believing sufferers to simply be malingerers looking to escape their combat duties. Suspicions of malingering partly derived from the opinions formed about hysteria in the years preceding the war. At the end of the 19th century, Jean-Martin Charcot (1825–1893) introduced the notion of traumatic hysteria, but between 1901 and 1908 Joseph Babinski (1857–1932) cast doubt on his mentor’s ideas, transforming hysteria into a purely functional illness in which suggestion played a critical role and where malingering was not clearly differentiated. Hysteria then became known as pithiatism, a word composed of Greek roots meaning “curable by persuasion.”³

Suspicion of malingering had a perverse impact on treatment methods because many doctors believed that these soldiers should receive aggressive treatment. A vast field of medical experimentation using coercive psychotherapy techniques then developed in order

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to find a cure for these soldiers and to send them back to the battlefield as quickly as possible. A medical–military collusion ensued.

In this article, we present the treatment of soldiers with war neuroses in France, where psychoelectric therapy was developed to the level of a widespread therapeutic system. This form of therapy for war neuroses was not limited to France; several medical–military services used it in the Allied and in the German coalition armies.^{4,5}

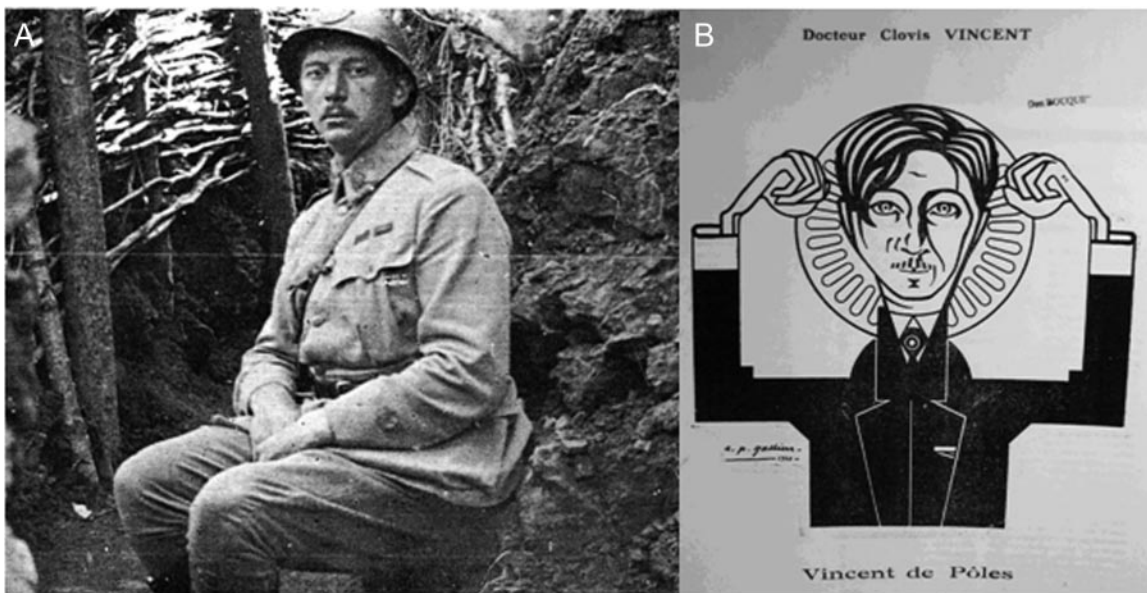
CLOVIS VINCENT, THE INVENTOR OF THE TORPILLAGE METHOD At the beginning of WWI, the flaws of classic methods for treating hystero-pithiatic symptoms were obvious, and the use of electric current or the injection of chemical substances became a popular addition to the existing methods of persuasion. The use of electricity for therapy in neurology essentially began with the work of German neurologist Wilhelm Erb (1840–1921), and within several decades, it became an established form of treating hysterical patients at the Salpêtrière Hospital in Paris. However, during the war, the modalities for applying the electric current were improved, and in 1916, they culminated in the invention by Clovis Vincent (1879–1947) of torpillage, an aggressive form of treatment for intractable psychoneuroses.

In 1905, Vincent became an intern in the Paris hospitals. He worked under Achille Souques (1860–1944) and Joseph Babinski prior to becoming a hospital physician in 1913. When war broke out, Vincent was appointed as a doctor in an infantry regiment. During the spring battles of 1915, he himself fought in the war and trained soldiers for battle. Vincent then served as assistant to Professor Maxime Laignel-Lavastine (1875–1953) at the 9th military region center of neurology in Tours, later taking charge of the center himself. He focused his work on soldiers with war psychoneuroses, believing them to be “the only ones who, with the right treatment, [could] still take up their arms and fight for their country.”⁶

Torpillage (literally, torpeding) was the byproduct of the harsh psychotherapy used by Babinski during peacetime. However, Vincent did modify the method by combining it with forced rehabilitation and by replacing the faradic current with a galvanic one.⁷ Torpillage was the term chosen by soldiers receiving the treatment because they likened the electric part of the therapy to being hit by a shell (*une torpille*).⁸ During treatment, the doctor would strongly exhort the soldier to return to a normal state of being with the help of the electric current. Vincent compared his therapy to being involved in a military battle against the affected soldiers.⁹ He recognized that during the painful phase, soldiers often rebelled. They would shout, struggle, and insult the doctor.

According to Vincent, it was important not to consider the soldier cured too soon as he remained in

Figure 1 Images of Clovis Vincent



(A) Clovis Vincent on the battlefield (1917) (in Le Beau¹⁹; permission given by Elsevier). (B) Sketch drawing of Clovis Vincent emphasizing his involvement in torpillage. The legend “Vincent de Pôles” is a play on words using the French word *pôle* (electric polarity) and Vincent de Paul, who was a priest from the 17th century who was sanctified because of his devoted care for the poor (source: Académie Nationale de Médecine, Paris).

an extremely fragile state. The final stage of the treatment was the physical training stage, which prepared the soldiers for their return to combat. Training consisted of jumping and ladder-climbing exercises under the supervision of other soldiers who had also been treated for nervous disorders.

FROM THE MIRACLE CURE TO THE DESCHAMPS TRIAL According to Vincent,⁶ the torpillage method produced spectacular results. It also enabled savings to be made by preventing soldiers with apparently incurable nervous conditions from successfully claiming pensioned discharge from the military. The therapeutic success of torpillage expanded beyond the center in Tours. Other neurologists such as Souques at the Paul-Brousse hospice (for the treatment of pure cases of camptocormia) and André Gilles in a front-line neuropsychiatric center used an adapted version of the method to reduce its aggressiveness.^{10,11} *Société de Neurologie de Paris* and the *Société Médicale des Hôpitaux* declared their support of Vincent's method.^{7,12}

At the beginning of 1916, Vincent was confronted with 3 soldiers who refused torpillage treatment. Vincent accused them of malingering. The 3 soldiers were tried and initially found guilty in Tours, but in the end, they were acquitted with the acknowledgment that their illness was legitimate and incurable.¹² Although Vincent was affected by this conclusion, the issue remained confidential, unlike the Deschamps trial, which began in May 1916.

Baptiste Deschamps, a soldier in the French army, was wounded in October 1914; he fell with all his equipment from a height of 3 meters, landing feet first. He was evacuated to a military hospital, where he was operated on for an inguinal hernia. He subsequently had serious camptocormia. He was successively sent to several neurologic centers, finally arriving in Vincent's center in Tours. Vincent told Deschamps that he would be able to cure him using the torpillage method. Deschamps was not convinced and refused to subject himself to electric treatment, as he considered it to be a form of torture. A violent altercation broke out between the 2 men with Deschamps striking Vincent, who as a former amateur boxer, hit back. Deschamps was summoned to a tribunal and was handed a mild punishment in the form of a 6-month suspended prison sentence.¹³

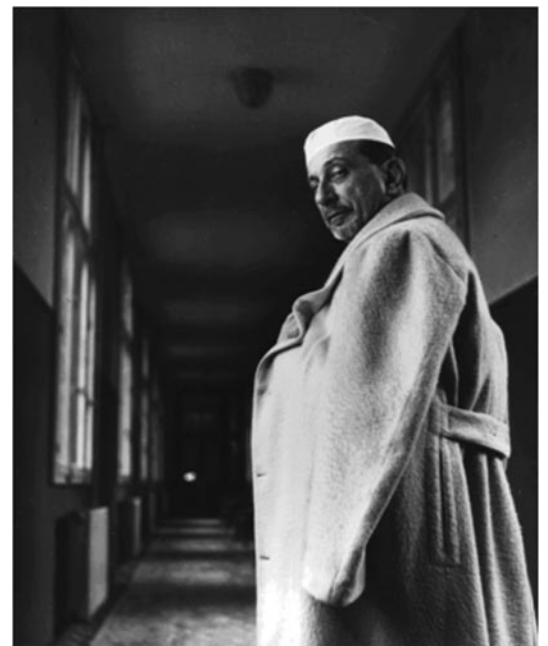
This soft verdict sounded the death knell for the treatment center in Tours. Vincent, rattled by the Deschamps affair, asked to be sent back to the battlefield as a doctor in an infantry regiment. After WWI, he became one of the founders of French neurosurgery alongside Thierry de Martel (1875–1940).

GUSTAVE ROUSSY, THE SUCCESSOR The closure of the center for psychoneuroses in Tours did not resolve the problem of chronic psychoneurosis sufferers. From the beginning of the war, Gustave Roussy (1874–1946) focused his efforts on the chronically neurotic patients who haunted the neurologic centers. He decided to take over where Vincent had left off.

Roussy was born in Vevey in Switzerland and began his medical studies in Geneva. He became an intern in the Paris hospitals under Pierre Marie and Jules Déjerine (under whom he presented his thesis on the thalamic syndrome in 1906). He was appointed head of the Paul-Brousse Hospital in 1913 where, during WWI, he took charge of a military neurologic center. At the beginning of 1917, he took over as head of the neurologic center in Besançon, the 7th military region, and then decided to open a new center in Salins-les-Bains, a spa town in the Jura region, for soldiers with psychoneuroses. He wanted to calm the soldiers' hostility toward the treatment. Roussy is sometimes referred to as the "Pétain of neurology" because the methods he applied to appease the soldier–neurologist conflict resembled those used several months later by Commander-in-Chief of the French Army, Philippe Pétain (1856–1951), to quell the mutinies in French troops.¹³ However, the general principles of the treatment used at the Salins-les-Bains center remained similar to those used in Tours by Vincent.

At first, faradization was carried out using virtually pain-free currents so that the soldiers would re-

Figure 2 Gustave Roussy shortly after the Great War (source: Institut Gustave Roussy, Villejuif)



late the painless nature of the treatment to their comrades. However, Roussy recommended the use of more intense faradization in difficult cases. To begin with, electrodes were placed on the targeted areas and then, if necessary, on more sensitive areas such as the soles of the feet or the scrotum. It was sometimes necessary to incorporate certain complementary measures like disciplinary isolation or a milk diet. Soldiers in the recovery phase performed military exercises under the supervision of officers who had been cured using the same method.¹⁴⁻¹⁶

The novelist Louis-Ferdinand Destouches, alias Céline (1894–1961), called on his own experience as a wounded soldier during the Great War to describe torpillage and doctor Roussy in his novel *Voyage au Bout de la Nuit* (Journey to the End of the Night). Céline, a cuirassier, was wounded in October 1914 by a bombshell explosion which lifted him from the ground, hurling him into a tree. In a state of concussion, he underwent electric shock treatment in 1915 at Val-de-Grâce Hospital.¹⁷ Roussy appears in *Voyage au Bout de la Nuit*, under the pseudonym of Professor Bestombes.¹⁸

THE DEMISE OF ELECTRIC SHOCK TREATMENT Vincent's and Roussy's different methods for treating neurotic patients caused a quarrel between the 2 men. In 1917, having returned to the front as a regiment doctor, Vincent became aware while on the battlefield of one of Roussy's reports which condemned the failure of his torpillage method. Vincent wrote a scathing response directed at Roussy:

Yes, I have gone away to rest ... on the front, not the front where people go in their cars, but to the real front where people hide in trenches because I believe that in a nation such as ours, in which people live and die as equals, everyone should go there themselves from time to time.¹⁹

In October 1917, Montpellier-based Professor Louis Rimbaud²⁰ (1877–1967) became unwittingly involved in the Vincent-Roussy conflict. He reported on a visit to the treatment center run by Roussy, showing it in a very positive light. A comparison was made to the detriment of the Tours center run by Vincent,²¹ who used his right to respond to stake a strong claim to authorship of the method.

At the Salins-les-Bains center, the most difficult cases were assigned to chief physician Roussy,²² who was being faced with more and more therapeutic failures, evasions, and patients refusing treatment. In January 1918, Roussy sent 6 soldiers with camptocormia to the Besançon military tribunal for refusing electric treatment on several occasions. The local press broadcast the story, linking it to the Deschamps ordeal.²³ The 6 soldiers were given a symbolic suspended sentence of 5 years' public service.

For Roussy, this ruling constituted an official disavowal and marked the end of the all-powerful faradization treatment that was being contested by soldiers and a growing number of doctors. In May 1918, a highly critical article on Roussy and his methods was published in the journal *Le Populaire*. It provided an elaborate description of the intense suffering and torture inflicted on the soldiers. The anonymous journalist made a general attack on the opacity surrounding the running of the neuropsychiatric centers.²⁴

The French army health service was unswayed by Roussy's recriminations following this article and asked him to accept the decisions made by the medical-military committee. Over the course of 1918, faradization gradually fizzled out. Publications on the subject became rarer and, with the end of the war, neurologists lost interest in hysteria. Gustave Roussy gradually directed his career toward anatomopathology and became one of the great cancer specialists.

The therapeutic events and methods described above opened the door to important discussions about the patient's right to refuse treatment. They also led to a progression of medical conceptions and subsequently to the authentication of post-traumatic stress disorder in military conflicts in the 20th century.

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DISCLOSURE

Dr. Tatu reports no disclosures. Dr. Bogousslavsky serves on the editorial boards of *Clinical Neurology and Neurosurgery*, *International Journal of Neural System*, and *BMC Neuroscience*, as chief editor of *European Neurology*, *Frontier in Neurology and Neuroscience*, and as guest editor of *Cerebrovascular Diseases*. Dr. Moulin serves on the editorial board of *European Neurology* and as guest editor of *Cerebrovascular Diseases*. Dr. Chopard reports no disclosures.

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