

Dr Halsted's Addiction

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"Has there ever been a saga of more poignant miseries, of more dramatic recoveries, of more magnificent triumphs?"

— Emile Holman¹

Dr William Stewart Halsted (1852–1922), the first professor of surgery at Johns Hopkins University, was the preeminent surgeon of his generation and, indeed, one of the greatest surgeons of all time. His monumental contributions to the evolution of modern scientific surgery are especially remarkable, inasmuch as he struggled with drug addiction for most of his professional life.

Thirty years ago, the late Dr Peter Olch, a graduate of Johns Hopkins Medical School and a Halstedian scholar, wrote: "Until very recently it appeared that only a few intimate friends and associates knew of [Halsted's] 'illness' ... and after his death, they and his admiring biographers insisted that he overcame the problem. ...I have been told that for many years... his addiction was a forbidden topic of open conversation around Johns Hopkins. However, whispered conversations continued in the corridors. ...As we now realize, pertinent information was known to a number of individuals, but deliberately suppressed."²

On September 15, 1884, unbeknownst to 32-year-old William Stewart Halsted—who had already achieved distinction as a surgeon and teacher in his native New York City—a landmark event destined to influence the practice of surgery and forever alter Halsted's lifestyle took place halfway around the world in Heidelberg, Germany. At the Ophthalmological Congress, Dr Josef Brettau presented a paper and conducted a live demonstration for Dr Carl Koller of Vienna regarding the successful use of cocaine to anesthetize the cornea and conjunctiva. Dr Henry D. Noyes of New York attended the meeting and described Koller's findings in a letter to *The Medical Record*, published on October 11, 1884.³

Upon learning of Koller's discovery Halsted, director of the Outpatient Department at Roosevelt Hospital, along with associates and 25 to 30 medical students began investigations (in late October or early November of that same year) to evaluate the possible usefulness of cocaine in general surgery.⁴ Through experiments on himself and the others, Halsted was the first to comprehend: 1) the principle of regional anesthesia by nerve blocking; 2) the superiority of intradermal infiltration for anesthesia of the skin; 3) that satisfactory anesthesia could be obtained with dilute solutions of cocaine, thereby reducing toxicity; and 4) that cocaine anesthesia could be prolonged by arresting or reducing circulation to the anesthetized area.^{4,6}

Unaware of the insidious ease and rapidity of cocaine addiction and its disastrous effects, the group used the drug freely and sometimes indiscriminately, but often noticed that larger doses resulted in nausea and dizziness. Those with a cold sniffed cocaine to clear nasal passages, whereas others sniffed during theater performances, as the drug seemed to "add color to the play." A nonmedical friend recalled that Halsted gave him "an injection of cocaine when that drug was first attracting attention and was being experimented with."⁷

By the time the evil effects of cocaine—severe mental and physical deterioration—were generally recognized, Halsted and several colleagues had become addicted. During periods of extreme agitation engendered by the drug Halsted initially turned to morphine and later to alcohol, but with little relief. Subsequently, he worked erratically and his attendance at meetings of the prestigious New York Surgical Society, of which he was a member, declined precipitously. Although he had accumulated considerable experimental data on cocaine anesthesia, Halsted published only 1 short article, obviously written while under the influence of cocaine.⁸ The first sentence, which typifies the text, demonstrates the marked contrast between this veritable nonsensical jumble of words and Halsted's other literary productions, characterized by their clarity and precision:

Neither indifferent as to which of how many possibilities may best explain, nor yet at a loss to comprehend, why surgeons have, and that so many, quite without discredit, could have exhibited scarcely any interest in what, as a local anesthetic, had been supposed, if not declared, by most so very sure to prove, especially to them, attractive, still I do not think that this circumstance, or some sense of obligation to rescue fragmentary reputation for surgeons rather than belief that an opportunity existed for assisting others to an appreciable extent, induced me, several months ago, to write on the subject in hand the greater part of a somewhat comprehensible paper, which poor health disinclined me to complete.

Feeling that his "breakdown necessitated a trip abroad," Halsted traveled to Vienna in the autumn of 1885.⁹ Contrary to his best interest, however, he showed Dr Anton Wolfler (Dr Theodor Billroth's first assistant) how to use the drug, then demonstrated to Thomas, the famous American dentist in Vienna, the technique of injecting cocaine into the inferior dental nerve.⁶

In early 1886, Dr George Brewer of Baltimore visited Halsted at home to discuss the possibility of obtaining a job in the genitourinary outpatient clinic at Roosevelt Hospital. Much to Brewer's surprise Halsted was "very excited and talked constantly about everything under the sun from the transit of Venus to gonococci." He kept Brewer there all afternoon and well into the evening. Whenever Brewer attempted to leave, Halsted would "start up again."¹⁰

By this time Dr William Welch, Halsted's closest friend and confidante, had moved to Baltimore as the newly appointed first Professor of Pathology at Johns Hopkins. Concerned about the seriousness of his friend's problem, Welch hired a schooner with 3 seamen, and sailed with Halsted to the Windward Islands, hoping to wean him off cocaine.¹¹ This therapeutic sailing trip in February and March 1886 failed; Halsted pilfered cocaine from the ship's stores.¹²

Thereafter, Halsted worked briefly on the preparation of lectures to be given in competition with Drs William T. Bull and Richard J. Hall for the Chair of Surgery at the College of Physicians and Surgeons; but illness ultimately precluded his participation.¹³

Finally, in May 1886, Halsted, encouraged by friends and family, entered Butler Hospital, a leading mental institution in Providence, Rhode Island, that also accepted those addicted to alcohol and drugs.

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In an effort to maintain anonymity, he used the name William Stewart. Although hospital records have never been located, it is possible that Halsted received morphine to ease the effects of cocaine withdrawal and may have bribed attendants for additional quantities.¹⁰ He was discharged in November and accepted an invitation from Welch to move to Baltimore and work in the pathology laboratory while the Johns Hopkins Hospital was under construction.

Beginning in mid-December 1886, Halsted with the assistance of Franklin Mall, the first Fellow in Pathology, performed a series of experiments on dogs to determine the best method of intestinal anastomosis. Together they proved that anastomotic sutures should always include the submucosa, the strongest layer. On April 5, 1887, 4 days after the study was completed, Halsted of his own volition reentered Butler Hospital; however, while en route he stopped at Harvard to present a précis of his recent study.¹⁴

During this second confinement, Halsted penned 2 letters to Mall,^{15,16} both quite legible, devoid of any telltale signs of tremor, and written in an intelligible manner. In one he stated, "I have about finished my article and expect to have it ... ready ... for Dr Welch's inspection and yours in about one week." The other contained a poignant reference to his illness, "I would like to write more but am not very well."

After 9 months of hospitalization without money to bribe attendants, Halsted was discharged on December 31, presumably cured of a "morphine habit"—though once again, without the benefit of hospital records for examination.² He returned to Baltimore and for the next 2 years conducted some of his most important studies regarding fundamental problems of operative technique and wound healing. William Councilman, Welch's associate, recalled, "It is difficult to think of surgery more carefully conducted than was [the] experimental surgery by Halsted. It was scientific in that he tested by experiment all theoretical conceptions of the art." Interestingly, Councilman remembered an incident when Halsted injected his inferior dental nerve [presumably with cocaine] to relieve a raging toothache and permit a painless extraction.¹⁷

Prior to the opening of Johns Hopkins Hospital on May 7, 1889, the Chair of Surgery was offered to Dr William Macewen of Glasgow, who declined. Afterwards, Welch convinced the trustees, who were undoubtedly aware of Halsted's "morphia record" and the uncertainty of cure¹⁸⁻²⁰ to appoint him "on trial." Accordingly, in February, the trustees "invited" Halsted to be Surgeon-in-Chief to the dispensary and acting surgeon to the hospital for 1 year.^{20,21}

In a letter to Mall on August 17, 1889, Welch wrote, "The hospital is in full blast ... and Halsted ... does nothing but operate the whole forenoon and it must be admitted with brilliant results."²² Dr William Osler, Professor of Medicine, also felt that Halsted was an immediate success, and that his early work on surgical technique, wound healing, hernia repair, and operation for breast cancer had greatly enhanced the hospital's reputation.¹⁸ The next year Osler wrote the president of Johns Hopkins University, "Halsted is doing remarkable work in surgery and I feel that his appointment to the university and the hospital would be quite safe."²³ Shortly thereafter, Halsted was appointed Surgeon-in-Chief to the hospital, as well as Professor of Surgery. This action, however, was not taken without deliberation and referral of the matter to the executive committee for reasons not recorded.²⁴

On June 4, 1890, Halsted married Caroline Hampton of Columbia, South Carolina, his former scrub nurse at Hopkins, after which the couple visited the Hampton hunting lodge in mountain-

ous Cashiers, North Carolina. Enthralled by the isolation and beauty of the surroundings, Halsted ultimately purchased the property and named it High Hampton. Osler said, "He [Halsted] married a woman after his own heart and like himself as Sister Rachael used to say 'a little odd.' They were well matched ... had no family, cared nothing for society but were devoted to their dogs and horses."^{18,25}

Despite support from Welch and now Caroline, who in all likelihood ultimately used morphine to cope with her own loneliness and depression,^{25,26} Halsted continued to struggle with drug addiction. In a letter from Columbia, dated April 8, 1891, he wrote the hospital trustees: "Will you kindly grant me an extension of my leave of absence? For 6 months I have had what I suppose to be malaria, and I think that it would be inadvisable for me to return to Baltimore before the middle of July."²⁷ The Board accepted his explanation and granted the request, with specific reservations.²⁸

Although Halsted continued to be a productive scholar, the problem of his unexcused absences from the hospital prompted several letters of complaint from the Board of Trustees, Executive Committee, and Medical Board.²⁹ The trustees notified Halsted "that his long absence ... during the past summer is ... subversive of proper discipline, and hurtful to the true interest of the hospital." Notwithstanding, there is no record of Halsted ever acknowledging the Board's actions and no evidence that the latter altered his behavior. He continued to vacation from May until October, and no one seemed to know where he went, except that he invariably spent part of the summer at High Hampton. He made frequent trips abroad, usually alone, during which "he delighted in brief periods [actually a week or more] of complete seclusion,"³⁰ before or after his visits to various European clinics. While in Baltimore Halsted preferred to work at home in the quiet privacy of his study, where he was shielded from all interruptions; moreover, his visits to the hospital were sporadic and depended on his health, work he was engaged in, and the problems of the resident surgeon. "At times a week or more might go by without his appearance at the hospital."³¹

At the Halsted Centenary in 1952, Dr James Mitchell, who spent nearly 10 years with Halsted, said: "I heard him allude to cocaine ... once [when] we were going through the wards and came to a man who was very restless." When Halsted learned that the patient had undergone a herniorrhaphy under cocaine that morning, he quickly responded, "Give him morphia. If you knew how terrible the suffering is with that restlessness after cocaine, you would not stint his morphia."³²

Osler's secret *Inner History of the Johns Hopkins Hospital*, first published in 1969, disclosed the following information regarding Halsted's addiction¹⁸:

He [Halsted] had been living in Baltimore for 2 years, working with Dr Welch and struggling to recover from the cocaine and morphia habit which he had acquired in New York. The proneness to seclusion, the slight peculiarities, amounting to eccentricities at times, (which to his old friends in New York seemed more strange than to us) were the only outward traces of the daily battle through which this brave fellow lived for years.

When we recommended him as full surgeon to the Hospital in 1890, I believed and Welch did too, that he was no longer addicted to morphia. He had worked so well and so energetically that it did not seem possible that he could take the drug and do so much. About six months after the full position had been given, I saw him in a severe chill, and this was the first intimation I had that he was still taking morphia. Subsequently I had many talks about it and gained his full confidence. He had never been able to reduce the amount to



William S. Halsted became Professor of Surgery in 1892. Reprinted with permission of The Johns Hopkins Press from *The Johns Hopkins University School of Medicine: A Chronicle*. Vol I by Alan M. Chesney, MD.

less than three grains daily; on this he could do his work comfortably and maintain his excellent physical vigor.

During hospitalization preceding his death on April 30, 1934, Welch told David Sprong, a house officer at Johns Hopkins Hospital¹:

Although it has been widely reported that Halsted conquered his addiction, this is not entirely true. As long as he lived he would occasionally have a relapse and go back on the drug. He would always go out of town for this and when he returned he would come to me, very contrite and apologetic, to confess. He had an idea that I could tell what he had done. I couldn't, but I let him go on thinking so because I felt it was good for him to have somebody to talk it over with.

Thus, Halsted endured a life of controlled addiction in which he apparently cured himself of cocaine abuse by substituting morphine; no less a habit, but one that allowed him to live a "courageous 30 years of fruitful activity with the haunting enemy always at hand"³³ but without deterioration of self, health, or mentality.³⁴

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