Historical vignette

Personal recollections of Walter E. Dandy and his Brain Team

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Walter Edward Dandy (1886–1946) began his surgical training at the Johns Hopkins Hospital in 1910 and joined the faculty in 1918. During the next 28 years at Johns Hopkins, Dandy established a neurosurgery residency training program that was initially part of the revolutionary surgical training system established by William S. Halsted but eventually became a separate entity. Dandy’s residents were part of his “Brain Team,” a highly efficient organization that allowed Dandy to perform over 1000 operations per year, not counting ventriculograms. This team also provided rigorous training in the Halsted mold for the neurosurgical residents. Although exacting and demanding, Dandy was universally admired by his residents and staff. This article describes Dandy’s neurosurgical residency program at Johns Hopkins, and provides personal recollections of training under Walter Dandy.

KEY WORDS • Brain Team • Walter E. Dandy • William S. Halsted • neurosurgical history

Historical Background

When the Johns Hopkins Hospital first opened to patients on May 7, 1889, William S. Halsted was appointed associate professor of surgery and acting chief of the Department of Surgery. After a 1-year interim, he was officially named surgeon-in-chief of the dispensary in 1890; he was appointed professor of surgery in 1892. One of Halsted’s most important contributions to medicine and surgery was his famous surgical residency training program, the first formal postgraduate residency program for surgeons in the United States. At that time, the surgical subspecialties were not sufficiently developed to stand apart from general surgery or train their own residents. Although Halsted established separate clinics for the various surgical subspecialties, including a division for diseases of the nervous system, his residents trained in all fields of surgery.

Halsted’s revolutionary surgical residency program set the precedent for surgical training in the United States. Initially, a prospective resident completed an internship of undefined length, until Halsted felt that the individual was skilled enough to move ahead in his training. After internship, the residency consisted of 6 years as assistant resident, followed by 2 years as house surgeon. The assistant residency period was further subdivided into clinical and research years, because a key goal of Halsted’s program was to train not only skilled surgeons, but also creative and innovative physician-scientists who would advance their respective fields through basic research.

Halsted’s first resident, Frederick J. Brockway, began on May 13, 1889, but resigned in October of 1890 to teach anatomy in New York. During his tenure, Halsted would train a total of 17 resident surgeons and 55 assistant resident surgeons, many of whom went on to academic careers. Among this group were three resident surgeons who eventually made significant contributions to the young field of neurosurgery: Harvey W. Cushing (residency, 1896–1900), George J. Heuer (residency, 1908–1914), and Walter E. Dandy (residency, 1911–1919).

After Halsted’s death on September 7, 1922, he was succeeded by John M. T. Finney as acting professor of surgery. Finney held the position from 1922 through 1925. Until Finney’s tenure, the neurosurgery service had no full-time assistant resident, but only the part-time, case-to-case assignments of general surgery assistant residents. Finney promptly assigned an assistant resident of the Halsted program to the neurosurgery (Dandy’s) service for 1 year of the 8-year residency program. This later became a 2-year assignment under the direction of Dean Lewis, who became the new chairman of surgery in 1925. After Lewis’s retirement in 1939, Warfield M. Firor (who had been Dandy’s second full-time neurosurgery resident from July 5, 1925 to January 29, 1927) assumed the role of acting department chairman until an extensive nationwide search led to the appointment of Alfred H. Blalock as chief of surgery on July 1, 1941. It was not until 1941, when Blalock immediate-
ly discontinued the 8-year Halsted program of surgical residency in favor of his own 5-year general surgery program, that neurosurgery had its own residency program.

Dandy graduated from the Johns Hopkins University School of Medicine in 1910. In 1910 and 1911, he performed research with Cushing in the Hunterian Laboratory, and in 1911 and 1912, he served as clinical assistant to Cushing in his first year in the Halsted general surgery residency.5 In 1912, Cushing left Hopkins to become the surgeon-in-chief at the Peter Bent Brigham Hospital in Boston. This move left Heuer, then chief resident to Halsted, in charge of both general surgery and neurosurgery under Halsted. Heuer and Dandy were both strongly interested in neurosurgery, worked well together, and jointly published three neurosurgical papers. When Heuer left Johns Hopkins in 1922 to become the head of the department of surgery at the University of Cincinnati, Dandy became the sole neurosurgeon at Hopkins.1

By 1940, Dandy was acknowledged as a founding father of the young field of neurosurgery and the leader of a precise and efficient group at Johns Hopkins, who were known as his “Brain Team.” It was Dandy who inspired Irving J. Sherman to pursue a career in medicine that began with his becoming a Halsted surgical intern on July 1, 1940.

In 1940, when Sherman began his surgical training at Johns Hopkins under Warfield Firor (the interim chairman of surgery), Halsted’s modified general surgery residency program was still in effect. There were eight 1st-year residents, only two of whom were kept on to become 2nd-year residents. Only one of these two was then allowed to complete the 8-year residency program. Two years of the program were dedicated to neurosurgery, which were then spent on Dandy’s Brain Team.

Irving J. Sherman

During his 28 years on the faculty at Johns Hopkins, Dandy trained eight residents who became neurological surgeons. One of these residents was Irving J. Sherman. Born in 1916 in Atlantic City, New Jersey, Sherman received his A.B. from the Johns Hopkins University in 1936 and his M.D. from the Johns Hopkins School of Medicine in 1940. He began his surgical career on July 1, 1940, as a Halsted surgical assistant resident at Johns Hopkins (Fig. 1). He was kept on as a 2nd-year assistant surgical resident in the Hunterian Laboratory, doing research and teaching dog surgery to the medical students.

In early December of 1941, Charles Troland, the senior resident under Dandy, entered the U.S. Army to serve in World War II, and Sherman became Dandy’s new assistant resident in neurological surgery, with Frank Otenasek becoming the resident. Sherman remained in this position until the spring of 1943, when he joined the army, serving as a neurosurgeon with the 108th Mobile Auxiliary Surgical Evacuation Hospital in Europe from Utah Beach to the Russian demarkation zone. (It is of interest that in World War I, Captain George Heuer, interrupting his Halsted residency, had served as chief surgeon of Evacuation Hospital No. 10 in Europe.) After honorable discharge from the army in February of 1946, Sherman began a residency with Houston Merritt, chief neurologist at the Montefiore Hospital in New York, who soon afterward became the chief of neurology at Columbia Presbyterian Hospital. In January of 1947, Sherman became the chief resident in neurosurgery and neurology at Hartford Hospital in Hartford, Connecticut, helping Benjamin Whitcomb, an army friend who had found himself with an approved residency but no neurosurgical residents. In August of 1947, Sherman became the sixth neurosurgeon to practice in the state of Connecticut, the only one west of New Haven. He served on the Yale faculty as instructor, assistant clinical professor, and associate clinical professor. His practice grew to a group of seven neurosurgeons by the time he retired in October 1986. He has maintained his association with the Johns Hopkins University and the School of Medicine, currently serving on the Council of the University President and as a member of the Johns Hopkins Medicine Alliance for Science and Technology. He is also a founding member of the Johns Hopkins Department of Neurosurgery Advisory Board. Sherman lives with his wife, Florence, in Palm Beach, Florida, and makes frequent trips to Baltimore.

Sherman’s Recollections of Dandy

My Time as a Halsted Resident and My First Exposure to Walter Dandy

At all levels of training in the Halsted residency, the schedule was the same: each resident was on duty 24 hours every day for 50 weeks each year, with 2 weeks off for vacation. In my time, every one of my contemporary residents was able to complete his tour of duty despite the grueling pace. When given my first appointment to the Halsted residency, I was told appointments were for 1 year only, and married residents would be viewed unfavorably with regard to continuing appointments. There was no contract or written agreement of any sort. First-year residents received room, board, and laundry services, but no money. In years 2 through 7, residents received room, board, laundry services, and $16 per month. In year 8, the chief resident received $100 per month because he also covered night and weekend calls for the hospital administrator.

The opportunity to train in this residency program was priceless. It was, in effect, tuition-free continuing medical education. I never heard a resident complain about the program or suggest changes, except with regard to the 2-year assignment to neurosurgery, which was mandatory and, at that time, had the toughest and most arduous schedule. Some of the general surgery residents had no interest in or enthusiasm for neurological surgery and had already been training for 2 to 4 years to become general surgeons. They may not have given Dandy the best assistance, thus causing him more stress. He fired several of these residents, throwing them completely out of the Halsted program.

Four of the 18 general surgery residents who went through this rotation, however, did become neurosurgeons. Thirty-two other interns and students at the Johns Hopkins School of Medicine were “exposed to Dr. Dandy’s service,” as Professor W. L. Fox put it in his biography Dandy of Johns Hopkins, and became neurosurgeons after training elsewhere.5

My own first exposure to Dandy’s service occurred during my sophomore year at the Johns Hopkins University. Trying to determine whether to go into the field of medi-
cine, two classmates and I misrepresented ourselves to the Johns Hopkins Hospital as medical students from Columbia and were permitted to watch the surgeries being performed that day. The first case I observed happened to be Dandy’s removal of a patient’s prefrontal lobe to gain access to a brain tumor, which he also removed. I was shocked to see this procedure performed, with the patient apparently surviving. I was also “hooked” on neurosurgery.

There followed my graduation from the Johns Hopkins University School of Arts and Sciences in 1936, graduation from the Johns Hopkins Medical School in 1940, and appointment to be one of the eight 1st-year Halsted residents on July 1, 1940. During that year, I elected to serve for several months on the Brain Team as a general surgery assistant resident. I was then fortunate to be kept on as one of the 2nd-year residents in the Hunterian Laboratory.

On July 1, 1941, Blalock became the new chief of surgery and immediately discontinued the 8-year Halsted program of surgical residency in all fields of surgery, despite the objections of the Halsted residents, and in its place instituted his own 5-year general surgery program. This change separated neurosurgery into its own residency for the first time. Charles Troland (resident in neurosurgery) and Frank Otenasek (assistant resident in neurosurgery) were kept on in their previous positions on Dandy’s service. When the United States entered World War II after December 7, 1941, Troland left immediately with one of the two Hopkins hospital units to enter the Army to serve in World War II. Otenasek remained at Johns Hopkins as chief resident, and I became Dandy’s assistant resident in neurosurgery.

Dandy’s Brain Team

In 1940, the Brain Team consisted of Dandy, his resident and assistant resident (each expected to serve for 2 years out of the 8-year general surgery residency), a 1st-year general surgery resident (rotating through for 1–2 months out of the 1st year), a full-time scrub nurse (Sarah Lambert), an assistant scrub nurse, a circulating nurse, a full-time nurse anesthetist (Grace Smith), a part-time nurse anesthetist, and Wallace Lawrence, the indispensable full-time orderly (Fig. 2). The Brain Team was legendary because of the magnificent neurological surgery performed as well as the efficiency and intensity with which the team worked its long hours. The part-time anesthetist would replace the full-time anesthetist 20 minutes before the end of a case, and the full-time anesthetist would then go into the next room to induce anesthesia in the next patient (Fig. 3). At that time, Dandy used Avertin for induction and basal anesthesia, followed by ether vapor delivered by endotracheal tube. The anesthetist sat under the patient’s head, completely covered by the drapes. This positioning required that the operating table, which was always level and horizontal, be elevated. The surgical team stood on 12-inch-high platforms surrounding the operating table. The full-time scrub nurse was responsible for all suture materials, which she passed only to the residents. The 1st-year general surgery resident was responsible for all surgical instruments, which he passed only to the residents, except for the suction and cautery devices, for which he was directly responsible. The residents, one on each side of Dandy, removed the used instruments from Dandy’s hands and replaced them with new instruments as needed. Rarely did Dandy have to ask for an instrument. As residents, we knew which instrument was needed, as we were mentally performing the operation along with Dandy. In this way, Dandy rarely had to remove his gaze from the operative field, and he was able to complete his surgery rapidly and efficiently, although in an unhurried manner.

Dandy’s surgical cases were also expedited by his technique when incising brain tissue. After blood vessels on the cortical surface were cauterized, a small incision was made in the center of a gyrus, which was then deepened and extended through the white matter in each direction as needed by a blunt dissector. This was done gently so that the dissector would pick up and expose blood vessels (which resisted gentle blunt dissection of the white matter) for identification and cauterization before they were cut, also sparing and protecting important vessels that did not supply a tumor.
the same way, blunt dissection was extended upward from the white matter through the cortex to complete the incision in the brain, thereby separating a tumor from normal brain tissue. In this way, Dandy could resect a prefrontal lobe (one side only) or the anterior tip of a temporal lobe in a few minutes, if that was necessary to expose the lesion. He typically performed these operations without significant blood loss or permanent neurological deficit (after unilateral prefrontal lobectomy, refined testing could detect mild emotional blunting, which resolved after a few months). Transfusion was required only rarely. This was fortunate, because Dandy did not permit the use of citrated blood. Any transfusion had to be done directly from the donor in the operating room, using 20-ml syringes to inject blood from the donor repeatedly into the ankle vein of the patient as the operation proceeded.

Walter E. Dandy, the Man

Historians are uniformly effusive in praise of Dandy’s research and surgery, but they are less kind with regard to his personality, no doubt because they did not know him personally, and because his episodes of bad temper were more sensational. In 1913, Dandy, working with Kenneth Blackfan, published the discovery of the circulation of the cerebrospinal fluid and the causes of hydrocephalus. At that time, Professor Halsted commented, “Dandy will never do anything equal to this again. Few men make more than one great contribution to medicine.” However, Dandy made many more great contributions to medicine, including air ventriculography, pneumoencephalography, total removal of an acoustic neuroma, intracranial partial nerve root section for trigeminal neuralgia, intracranial partial nerve root section for Ménière disease, intracranial nerve root section for glossopharyngeal neuralgia, removal of tumors of the third ventricle, removal of tumors of the lateral ventricles, treatment of intracranial aneurysms by surgical clip occlusion, anatomical description of the blood supply of the pituitary gland, and the technique for surgical removal of the pineal gland. He also observed and described arteries pressing on intracranial nerves as possible causes of trigeminal neuralgia and Ménière disease. This led to the work of Peter Janetta, who devised operations that would cure these and other cranial nerve conditions without sacrificing nerve fibers by simply removing the pressure from an artery on the involved intracranial nerve.

Dandy never charged schoolteachers, clergy, other medical workers, or patients who had no money to pay. At times, he also gave money to patients to help them with the expense of coming to Baltimore. I remember one case in which a young mother was sending her child alone from Philadelphia to be operated on by Dandy because she did not have enough money to cover the cost of the trip and related expenses for herself. Dandy sent her the money to enable her to come with the child and of course charged no fee. In another display of kindness, twice each year Dandy gave his residents sizable gifts of money, knowing that the $16 per month paid by the hospital did not go very far, even in those days.

There were stories of Dandy being dictatorial and demanding perfect service for his patients, and these were true. There were other stories, also true, of Dandy having outbursts of temper when “things did not go right in the operating room,” firing assistant residents, scolding personnel, and occasionally throwing an instrument. However, during my time on the general surgery and neurosurgery house staff (1940–1943), I never observed such incidents. Perhaps the members of the Brain Team, including Dandy himself, had become so proficient that things did not go right in the operating room only rarely during my time on his staff. Had
he mellowed? I doubt it, as he was no less demanding of perfection.

In neurosurgery’s infancy, when Dandy was developing new neurosurgical techniques and refining pioneering operations, the mortality rates were horrendous. In addition, he did not have the finely tuned Brain Team to assist him. For these reasons, things often did not go right in the operating room. In the early cases of air ventriculography there were three deaths, an unheard-of occurrence in the 1940s. In his first 21 operations for the removal of tumors of the third ventricle, there was a 33% mortality rate, although in the last 14 cases of this series Dandy was able to reduce the mortality rate to 14%. In the first 15 cases of tumors of the lateral ventricles, three of the first six patients died. Once again Dandy was able to refine his technique, resulting in no deaths among the next six cases. Dandy must have had tremendous courage, and must have endured significant stress, to persist and develop new procedures in the face of such mortality rates. He was doubtlessly supported by the knowledge that without surgical excision, all of these patients would have died from their tumors.

With regard to Dandy’s temper, I do recall one occasion when the 1st-year general surgery resident was slow in passing the suction device, and Dandy said sharply, “Do your sleeping at night.” That was a laugh, because we had all been up the whole night before, operating on several emergency trauma cases. On another occasion, I found myself scrubbing at the same time Dandy was. He looked at me and said quietly, “You should be in there assisting Otenesek.” I replied, “Dr. Dandy, Lawrence is off today, and I had to do his work positioning the patient before I could scrub.” Dandy seemed to accept that, but when I told Otenesek, he remarked that I had taken a big risk, “talking back to the Old Man,” whom he always addressed directly as “Dr. Dandy, sir.” On another occasion, I had started a craniotomy without releasing the air from the ventriculogram, as was routinely done. When Dandy took over the procedure, I informed him of what I had done. He looked at me and simply said, “Never do that again.” Not another word was spoken about my lapse, which caused no problem, as I had anticipated in this particular case—but that was no excuse. We had to play by Dandy’s rules.

**Dandy’s Neurosurgery Residents**

The Brain Team did a prodigious amount of work—over 1000 major operations per year, a figure that is confirmed by Hugo Rizzoli in his 1985 article, “Dandy’s Brain Team.” This tremendous caseload was made possible by Dandy’s demanding and rigid system. The same complete sets of neurosurgical instruments were prepared for every case. Before 8 a.m., the scrub nurse would set up and cover a prep- and-drape table for each case on the schedule, which consisted of anywhere from three to seven cases. The resident (covering Marburg patients) and the assistant resident (covering Halsted patients) each made rounds separately on their own cases starting at 6 a.m. The residents had a breakfast conference at 7 a.m. and were scrubbed, gowned, gloved, and ready to make the first incision at exactly 8 a.m. If there were one, two, or three cases scheduled for ventriculography, each of these patients had occipital bur holes made, the dura incised, and the scalp incisions sutured. They were placed on wheeled stretchers, the first one remaining in the operating room for air injection. This was followed immediately by a case not requiring ventriculography, and started by the residents. Meanwhile, Dandy would appear and perform the air injection on the first ventriculography patient. He would then scrub and take over the operation in progress. In the interim, the patient who had undergone air injection was taken immediately for x-ray studies by the assistant resident who held the patient’s head in each of the eight exact positions required for the ventriculography images. Neither the x-ray technicians nor the general surgery resident were entrusted with this exacting job. While the residents were closing the incision, Dandy would drop out, review the ventriculography images for the next patient and, if a craniotomy was indicated, would return to the operating room to personally mark the incision location on the patient’s scalp. Meanwhile, the residents had closed the incision in the previous case and had prepared the following craniotomy case. The operating table was never vacant. As soon as one patient was removed from the operating table, the table was wiped down and covered by a fresh sheet, and the next patient, in whom anesthesia had already been induced in the adjoining room, would be brought in and placed on the operating table. One of the previously set-up tables would be wheeled in and used to prepare and drape the new patient. The time allowed between the last stitch in one patient and the incision in the next was 10 minutes. When wound closure was started, all instruments not needed for closure were removed and placed on two huge trays, which were then put in a boiling water sterilizer to be readied for the next case. While Dandy performed the crucial parts of every operation that he scrubbed in on, during my time on the Brain Team I never saw him open or close during a single surgery. This gave him time to see patients in his office downstairs. The operating table never had time to cool off, and usually there was no time for members of the team to have lunch.

In general, one hour was allowed for a disc case or an intracranial fifth or eighth nerve section and two hours for a craniotomy. Remarkably, we were able to keep to that rigor-ous schedule. After surgery, which usually ended between 3 and 5 p.m., Dandy made rounds with the residents. The residents examined new patients and were almost always able to have them ready for surgery in the morning even though x-ray examinations, otolaryngology, and ophthalmology consultations had to be obtained in all brain cases. Such was Dandy’s prestige, that these services were always available without delay, even at night. During the 1940s, computed tomography and magnetic resonance imaging had not even been imagined. At that time, the only contrast medium for use in myelograms was Thorotrast, a radioactive dye that was deposited in the liver, where it remained radioactive and dangerous. Dandy would not permit its use in his patients, so we had no myelography. Nor did we have angiography; it had been introduced by Egas Moniz in 1927, but was also considered too dangerous for use in our patients. For these reasons, neurological examination, routine x-ray studies, and history, in addition to ventriculography in brain cases, were used to diagnose and localize lesions. In the 1930s, Dr. Dandy broke his own rule, which was “never do a craniotomy without knowing exactly where the lesion is.” On the basis of a patient’s history of Jacksonian seizures starting in the left index finger, in the presence of normal findings on ventriculography, Dandy explored the patient’s...
right motor strip and found a tiny surface lesion, which proved to be a glioblastoma multiforme. Its removal, with a margin of normal tissue, left the patient alive and well 8 years later. I have no information on subsequent follow up nor do I know of any other patient with glioblastoma multiforme who survived as long as 8 years.

At 7:30 p.m., the resident would report to Dandy by phone. Meanwhile, any head trauma cases in the emergency room had to be seen promptly and again 2 hours posttrauma in order to detect the possibility of a rapidly growing epidural hematoma. Patients on other services had to be seen when neurosurgical consultations were requested. Any patients who had undergone brain surgery that day also had to be seen at 2 a.m. to assess for evidence of postoperative bleeding or severe edema. Why at 2 a.m.? Because at 3 a.m., the operating room staff went home, and thereafter it would take too long to reassemble them if the patient needed to return to the operating room. “Halsted 7” was the neurosurgical floor for all cases except private patients who were in the Marburg Building or on the pediatrics floor. On Halsted 7, two 2-bed rooms were used as a neurosurgical ICU, with at least one specially trained nurse in constant attendance.

Craniotomy patients were kept here during their first 24 hours after surgery, along with any critically ill patients. This was the first ICU at the Johns Hopkins Hospital. Drains were not used because of the danger of infection. In the ICU, we kept a small brass case containing sterile ventricular needles and intravenous needles with syringes so that flaps could be tapped and excess fluid could be removed. The defect in the brain resulting from tumor removal, as well as a ventricle, could also be tapped with a ventricular needle if there was an accumulation of fluid sufficient to cause increased intracranial pressure. I personally made all 2 a.m. rounds for 15 1/2 consecutive months, except for the limited vacation days, and can recall finding only six cases that required emergency surgery on these rounds. Three of these cases were acoustic neuroma cases, in which patients were bleeding from the curetted internal auditory canal, and three were pituitary tumor cases, in which patients suffered frontal lobe edema due to compression from the retractor blades. While only these six cases necessitated an emergent return to the operating room, in all six, a patient’s life was saved as a result. Meanwhile, any patient with head trauma who had presented to the emergency department and required surgery had to be operated upon, and at 6 a.m. the day’s cycle started over again.

During these years Dandy was operating 5 full days per week. Each resident was constantly on duty for 50 weeks out of the year, being allowed 2 weeks of vacation. There were no nights or weekends off. When the service was light during Dandy’s vacation, one resident could leave the hospital for 2 or 3 hours, but no longer. I spent as much as 3 months at a time without leaving the hospital. Luckily, we had a barbershop in the hospital. When I was away, Otensek lost nearly 1 pound of weight per day, and when Otensek was away, I lost the same amount, because one resident had to do the work of two and did not have time for three meals each day.

The schedule was grueling, but no one complained. We loved working with Dandy and felt truly privileged to have that opportunity. I had great admiration, respect, and affection for the man. Moreover, although Dandy was at times dictatorial and demanding, his actions made it obvious that he cared deeply for our welfare, although not about how hard we worked. Despite this workload, Otensek and I remained alert and mentally and physically able to do our jobs without making mistakes. This arduous training enabled me, as the only neurosurgeon in a World War II Mobile Army Surgical Hospital unit, to work 40-hour shifts repeatedly. This required that I have two teams, each consisting of an anesthetist, a scrub technician, and a circulating nurse, each working 12-hour shifts. In battles we would receive 400 casualties straight from the battlefield every 48 hours, and I had to care for all of the head and spine wounds. I was able to work through three and a half shifts repeatedly. My shift was not over until the last patient who needed surgery, American or German, was operated upon. In retrospect, I am surprised that I was able to do this, but I remember clearly that I was never aware of fatigue or drowsiness while I was taking care of the wounded.

During the early 1940s, Dandy had great confidence in his team (Fig. 4). Otensek was in his 3rd and 4th years on Dandy’s service. He had spent more time on Dandy’s service than any of the previous residents had spent, and he was very, very good at his job. He taught me a great deal and scrubbed in with me on each type of surgery I performed, and of course I assisted at his surgeries. The residents did all of the emergency and general service cases without Dandy’s supervision. I never saw Dandy come in to operate on Saturday or Sunday, and he came in at night on only one occasion that I can recall: one of his patients from out-of-state, scheduled for brain tumor surgery in the morning, suddenly lost consciousness at approximately midnight. We performed a ventriculogram, which revealed a large brain tumor. Dandy felt obliged to do the surgery himself, and he came in at 2 a.m. and operated on the patient, removing a large, malignant glioma. Upon completion, he found that the only operations scheduled for that morning were three lumbar disc surgeries. He said that there was “no
sense going home and returning for 8 a.m. surgery,” so he ordered that we continue with the morning schedule. So, in the middle of the night, the three patients were awakened and brought to the operating room one after the other, and by 8 a.m. the day’s surgeries were completed—and neither the patients nor anyone else in the hospital protested!

Another incident that bears reporting occurred when Dandy sent me to Philadelphia to observe Temple Fay’s technique of freezing brain tumors in situ. It was surprising to see his patients sitting up in bed with refrigeration bulbs and tubing protruding from their heads and frost on the adjacent scalp. Gilbert Horrax, chief of neurosurgery at the Leahy Clinic, was visiting at the same time and for the same reason. As I walked behind these two famous neurosurgeons, I could not help but hear Fay complaining about Walter Dandy, whom he thought had said something derogatory about him. Horrax immediately responded, “Stop complaining, Fay. There’s nothing wrong with Dandy except that he is 20 years ahead of the rest of us.”

Horrax was exactly right. Dandy led the development of neurosurgery from a primitive and limited area of general surgery in 1912 to a point where it had become a recognized specialty with practitioners capable of producing cures through operations associated with low mortality rates. Between 1910 and 1946, Dandy published 160 articles covering virtually all aspects of neurosurgery, as well as six books. Much of his writing was innovative, reporting new laboratory and clinical discoveries as well as new diagnostic and operative procedures. I felt then that he was the greatest man that I would ever know and I will be forever grateful to him for the training he gave me.

A highlight of my residency occurred when both Dandy and Otenasek were out of town, and briefly I sat at Dandy’s desk, in Dandy’s chair, and saw the occasional patient who could not await Dandy’s return.

A greater honor occurred when Dandy autographed my copy of his last edition of Surgery of the Brain with the words: “To Dr. Irving J. Sherman, my good friend and former associate, Walter E. Dandy, 12/28/1945,” (Fig. 5).

References


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