Seymour D. Van Meter, MD (1865–1934) The Texan Who Wielded a Scalpel in Denver and Left a Lasting Legacy

James A. Magner, MD

Seymour Doss Van Meter (1865–1934) (Cover and Fig. 1) was a skilled general and abdominal surgeon who had a successful practice in Denver, in partnership with his daughter, Virginia. He had a reputation for particular skill with goiter operations and was known as a kind man who provided care to patients of all financial means. He served as president of the American Association for the Study of Goiter in 1929, an organization that later became the American Thyroid Association. Although he published little, his keen belief that the scientific method was the true hope of humankind led him to donate funds to establish a prestigious annual award given to a person who has made outstanding contributions to research on the thyroid gland or related subjects and who is not older than the age of 45 in the year of the award. (Funds have been supplemented over the years by industry.) The winner customarily delivers a 60-minute talk at the annual meeting of the American Thyroid Association, and since 1930 the list of awardees has included many young stars of the thyroid world. Many of the awardees, however, probably know little about the life of Dr Van Meter.

ISSN: 1051-2144/07/1702-0071

DOI: 10.1097/01.ten.0000261443.61857.e3





FIGURE 1. Dr. Seymour D. Van Meter near the height of his career, approximately 1910. Undated photograph. Reprinted with permission, Denver Public Library, Western History Collection, all rights reserved.

A Confederate Soldier Has a Son

The hot south Texas sun blazed down on the scrawny cattle grazing between the clumps of prickly pear, mesquite, blackbrush, and a few small live oak trees. Irish immigrants had settled near Sulfur Creek, and the little town of Oakville was made the county seat in 1856 and was granted a post office in 1857.1 A small stone courthouse was built, and the hanging tree nearby had plenty of use. Several stores, 2 hotels, a

livery stable, a school and 2 churches were established. In 1861, of 150 voters in Live Oak County, only 9 had opposed secession.² Men raised cattle and drove the herds to coastal towns or broke wild mustangs, which could be sold a few miles north in San Antonio or in east Texas. Families captured and slaughtered as many as a hundred wild hogs in a year, and their hides, meat, and tallow provided supplementary income. During the war, the demand for cattle increased and the business became more profitable. Although the war ended badly for the Confederacy, by 1867 Rep. Samuel T. Foster boasted that Live Oak County was one of the finest stock-raising areas in the state. There was little agriculture in the area in the 1860s, but in 20 years there would be growing tension between the farmers who fenced the land and the cattlemen who cut the fences.

William Cunningham Van Meter was a farmer who had attended Hampden-Sydney College in Virginia between 1849 and 1851.3 This all-male, Presbyterian, liberal arts school is the 10th oldest college in the United States (founded 1775). He expressed an interest in engineering, but he did not obtain a degree. No record remains of his hometown. After serving in the Confederate Army, he brought his wife, formerly Elfrida Victoria Wright, to Oakville, Texas. Their son, Seymour, was born there on October 18, 1865.⁴ The boy attended the public school, and he must have been a bright student. Due to scant information available at present, it is hard to imagine now what prompted his choice at age 20 to attend the University of Pennsylvania in Philadelphia, but he matriculated there in medical courses in September 1886. He was awarded the MD degree in May 1889

From Genzyme Corporation, Cambridge, Massachusetts.

Cover Photo: Dr Seymour Doss Van Meter at about the time of his graduation from medical school, 1889. Reprinted with permission from the Archives of the University of Pennsylvania, Philadelphia. All rights reserved.

Reprints: James A. Magner, MD, 500 Kendall Street, Genzyme Corporation, Cambridge, MA 02142. E-mail: james.magner@genzyme.com. Copyright © 2007 by Lippincott Williams & Wilkins

and was honored as sixth in his class.⁵ After completing an internship at Presbyterian Hospital in Philadelphia, he married Annie Virginia Cunningham, the daughter of a farmer, on May 1, 1893, in Moorefield, West Virginia, and their first daughter, Elfrida Victoria, was born the next year.

Denver Becomes a Booming City

Gold had been discovered in Colorado on Cherry Creek in 1858, and within 25 years the tiny settlement there, Denver, had become a populous city, second only to San Francisco in the West. Railroads further contributed to the success of the economy there, but the lack of medical facilities was only addressed in 1883 when the Union Pacific Railroad built a 66-bed hospital at 40th and York Street.⁶ But nurses were needed. Colorado's first bishop, Joseph Machebeuf, wrote to the sisters in Lafayette, Indiana, for assistance. Seven German-speaking nuns, members of the Poor Sisters of St. Francis Seraph of Perpetual Adoration, arrived in Denver in 1884. But after 6 years, Sister Mary Huberta believed that the order needed its own, larger hospital. The bishop urged caution, but Sister Huberta believed that St. Anthony, who traditionally aids the despairing, would help. The sisters sought donations at the mining camps and stood with their tin cups outside saloons, barbershops, and especially at the paymasters as railroad workers collected their wages. In May 1892, the new hospital, named for the saint that had helped it come into being, opened on West 16th Avenue and Raleigh Street, with 120 ward beds and 60 private beds. By then, other small hospitals also were opening.

Booming Denver seemed an opportune place for a young surgeon, and Dr Van Meter first established an office there in the early 1890s. A photo (Fig. 2) from about 1895, taken from the Central Presbyterian Church tower on Sherman Street, shows the state capitol building under construction, fine homes, and tree-lined streets.⁷ The buildings and smokestack of Denver General Hospital can be seen in the distance. Dr Van Meter's home, at 1723 Tremont Place, located about 6 blocks northwest of the capitol building, was not far from where



FIGURE 2. Panorama of Denver, circa 1895, with the capitol building under construction. Reprinted with permission, Colorado Historical Society, creator William Henry Jackson (1843–1942), No. CHS.J2616, all rights reserved.

this photo was taken. (The photos in this article have not been previously published, to my knowledge, except for the photo of Virginia Van Meter, which appeared in her medical school yearbook.)

Dr Van Meter first served as a staff surgeon at St. Francis Hospital from 1894 to 1897. He practiced at the City and County Hospital, starting in 1902, and also served at Mercy Hospital from 1905 until 1908. His offices were located at Suite 619 of the Majestic Building, and another address given was 1326 Columbine Street.⁵ He took 2 postgraduate trips to European surgical clinics, but details of these trips have been lost. Starting in 1901, he was a member of the Colorado State Board of Medical Examiners, and he eventually served as secretary-treasurer and executive officer of that organization. He belonged to the county and state medical associations and the American Medical Association, and he later served as president of the Denver City and County Medical Society. By 1910, he had published short articles on topics such as "Medical Licensure" and "Medical Laws and the Influences Which Mould Them," demonstrating his interest in how the young scientific practice of medicine was being organized in the United States. His early articles also dealt with surgical topics, such as "A New Operation for the Ingrown Toenail" and "Spontaneous Rupture of the Uterus."

A second daughter, Virginia Cunningham, was born in 1896, and his third daughter, Jane, was born in 1907.

In 1914, a book was prepared for distribution at a dinner at the University Club of the University of Pennsylvania to celebrate the 25th anniversary of Van Meter's class of '89. He had listed as his hobbies, "Team work in operating and up-stream superiority in trout fly fishing."⁵ In Denver, he was a member of the Wigwam Club, named after the American Indian dwelling, which celebrated fishing and other outdoor activities. He was also a member of the Cherry Hills Country Club.

He served in the Medical Reserve Corps, United States Army. After World War I, he took on additional surgical patients at Children's Hospital, Beth Israel Hospital, and St. Luke's Hospital, although most of his work was performed at Denver General Hospital, where he served on staff for 25 years.⁴

A photo (Fig. 3) from about 1891-1900 shows St. Luke's Hospital to consist of 2 substantial 3-story brick buildings, each with a high roof with more than a dozen gables.⁷ Two stone crosses are prominent, and the tall brick chimney from the heating plant emerges from behind one of the buildings. A horsedrawn buggy waits in front of the main entrance, with its white stone arch. The first x-ray department there, depicted in a photo (Fig. 4) dated 1896, shows 8



FIGURE 3. St. Luke's Hospital, Denver, circa 1891–1900. Reprinted with permission, Colorado Historical Society, creator William Henry Jackson (1843–1942), No. CHS.J71, all rights reserved.



FIGURE 4. The first x-ray department in St. Luke's Hospital, Denver, circa 1896. Harry Buckwalter and Dr C. E. Tennant prepare to x-ray Central City Marshal Mike Kehler. Reprinted with permission, Colorado Historical Society, creator Harry H. Buckwalter, No. CHS-B1470, all rights reserved.

large lead batteries on the floor, with cables stretched over chairs to electrical equipment on small tables, with a stout wooden table also available.⁷ An apparatus with a dozen large light bulbs is mounted prominently on the wall. The human skeleton hanging in the back corner likely was a handy reference when viewing a dim image of a bloody and bruised patient. Another photo (not shown) of the same hospital from about 1910 reveals that by then a third large adjoining brick building had been built.

Several old photos survive that capture scenes of Denver General Hospital, which was located at West 6th Avenue and Cherokee Street.⁷ One photo (Fig. 5) shows that the hospital was a 2-and-a-half story brick building

with dormers and projecting bays. Best shown is the west wing, where the surgical ward, operating rooms, tuberculosis ward, and administrative offices were located. The east wing, where the women's, children's, and typhoid wards were located, is in the distance. A sign near the curb reads, "Keep Space Open for Ambulance." A photo (Fig. 6) from about 1905 captures the linen-covered tables of the doctors' and nurses' dining room.⁷ It seems that coat and tie for doctors and white uniforms with high hats for nurses were standard. One can imagine a leisurely discussion ensuing about a difficult case. A view (Fig. 7) of the men's chronic ward from 1907 shows metal beds, white starched sheets. dedicated nurses and orderlies, and a

few patients; it appears that all of the window shades are drawn during the daytime.⁷ Years later, in 1927, a photo (Fig. 8) captures nurses and technicians at work in the laboratory at Denver General Hospital, which has a wall of windows, sinks, glass bottles, and an icebox.⁷ To the modern eye, it looks like the space into which the laboratory has yet to be moved. A photo (Fig. 9) taken in 1931 captured a nurse standing at the large porcelain sinks in the wash-up room at the Denver General Hospital, and a photo (Fig. 10) of an operating room taken that same year reveals a modern design.⁷ The Romanesque-style surgical wing of General Hospital, built in 1892, has been captured in another photo (Fig. 11) taken between 1930 and 1940.⁷

Thyroid Surgery in the Early Twentieth Century

No records remain to tell of Dr Van Meter's surgical practice. But contemporary texts have many surprises for modern readers. One must remember that in the era before widespread iodine supplementation, many otherwise healthy persons had substantial goiters that were both a cosmetic and medical problem. Moreover, surgery was the remedy not only for simple and multinodular goiters and for thyroid tumors but also for hyperthyroidism. One wanted to avoid the necessity of operating on a severely hyperthyroid patient, but diagnosing mild or early hyperthyroidism was tricky. A text from 1922 describes the usual medical and surgical methods at Western Reserve University in Cleveland. Dr Robert S. Dinsmore, the Third Resident Surgeon at Lakeside Hospital in Cleveland, elaborates on the "Goetsch test," which was used to differentiate between hyperthyroidism and early tuberculosis in a patient with weight loss, weakness, fatigue, and slight elevation of temperature but in whom the physical signs and x-ray findings of tuberculosis were negative.8 To perform this test, the patient was admitted to the hospital and allowed to have a quiet and calm environment. On the second day, the patient was injected subcutaneously with 6 minims of adrenalin chlorid [sic] 1:1000 (although this should be avoided if the blood pressure was above 160). At 5-minute intervals for 40 to 60 minutes, the observer



FIGURE 5. Denver General Hospital, circa 1910–1920. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28546, all rights reserved.



FIGURE 6. Doctors' and nurses' dining room, Denver General Hospital, circa 1905. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28565, all rights reserved.



FIGURE 7. Men's chronic ward, Denver General Hospital, circa 1907. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28572, all rights reserved.

was to score the blood pressure, pulse rate, respiration rate, nervousness, tremor of the fingers, hyperhidrosis, size of pupils, and pallor or flushing of the skin, as well as record verbal symptoms from the patient, and thereby achieve the differentiation of hyperthyroidism from tuberculosis. Patients with hyperthyroidism had more effects during the test, although Dr Dinsmore reports that he has tested 251 patients, and 89% had positive reactions of varying degrees.

A big controversy during this era was whether the glands of hyperthyroid patients should be treated with exposure to strong x-rays, usually a "maximum dose every 3 weeks" or, alternatively, whether the thyroid should be surgically removed. Dr George Crile, in his 1922 chapter, noted that 239 drugs had been credited with the cure of hyperthyroidism and that several hundred articles had reported use of x-ray therapy to treat this condition.⁹ Dr Crile put emphasis on the 1916 report in the St. Paul Medical Journal by Dr D. M. Berkman at the Mayo Clinic that "... Although in their experience the results of x-ray treatment were good, they were temporary; that the results were delayed and required many repetitions of treatment; that practically no dependable beneficial results were obtained in less than a month; and that in the more serious cases 'the excitement and mobilization incident to x-ray treatment usually offset whatever early benefits may be received." Thus, by about 1920, many experts were concluding that surgery was the better treatment. A commonly reported mortality rate for such operations, which likely were partial thyroidectomies, was about 1%. Infection postoperatively was a problem, but for more serious cases the wounds commonly would be left wide open and dressed with 1:5000 flavine gauze.¹⁰ The opinion was that it was important to allow the aseptic wound secretions to drain away from the patient to prevent fever. Delayed closure of the wound then was performed a day or two after the primary surgery. Drs Crile and W. E. Lower report that of 485 wounds left open in this manner, the mortality rate was 3.9%. Most patients were not severely hypothyroid after surgery, which was just as well since Dr Chester D. Christie at Western Reserve Univer-



FIGURE 8. Nurses and technicians at work in the laboratory, Denver General Hospital, circa 1927. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28585, all rights reserved.



FIGURE 9. The large porcelain sinks in the wash-up room, Denver General Hospital, 1931. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28594, all rights reserved.

sity found that thyroid extract did not reliably improve his patients with myxedema.¹¹ Tetany due to hypoparathyroidism occurred on occasion, and Dr Crile by 1922 preferred to attempt to visualize the parathyroid glands during the operation, although he feared that doing so might damage their blood supply.

More shocking to the modern reader is the fact that some degree of deception routinely was practiced on hyperthyroid patients who were being admitted for thyroid surgery, although it was felt that this was for their own good. A frightened and excited hyperthyroid patient was felt to be at greatly increased risk for surgical mortality. Dr Crile describes this method briefly as follows: "The patient is protected from worry, anxiety and fear by tactful management."¹⁰ A more detailed description is provided by Drs W. R. Goff and E. O. Rushing, both physicians at Lakeside Hospital.

"Because of the nervousness of these patients and their poor tolerance for suspense they are usually not told when the operation is to be performed; in fact, if possible, the subject of operation is altogether avoided, and stress is laid upon treatment. To prevent the patient from knowing exactly when the operation is to take place the following routine is carried out daily for several days beforehand.

"The operating-room clothes are put on usually the day after admission. Some kind of explanation has to be given for each move to satisfy the curiosity of the patient. He is told the pneumonia jacket and leggings are kept on to insure an even temperature of the body, etc.

"A hypodermic injection of sterile water is given every morning about 8 and breakfast is deferred.

"At 9 each morning, before the patient's breakfast is served, the anesthetist takes a nitrous oxid-oxygen machine to the bedside and, after explaining to the patient that she is going to give him some oxygen for his heart, the mask is held lightly over the face, and a small amount of nitrous oxid and oxygen is given, never allowing the patient to become unconscious. This procedure is usually explained by the ward physician the night before during his social call. In some cases several mornings are required to get the inhalations started, because if the patient becomes at all disturbed, the maneuver is suspended, to be tried again the next morning.

"On the morning of the operation a hypodermic injection of morphin, gr. 1/6, and atropin, gr. 1/150, is substituted for the sterile water. The patient is not disturbed by nurses or visitors after the hypodermic injection has been given, and at the usual time the anesthetist gives the inhalation. This time the patient is allowed to pass into the analgesic or anesthetic stage, and in this condition is operated upon in his bed, if the sensitivity of the case demands it, or is transferred to the operating room."¹²

A Daughter as a Partner

Dr Van Meter's oldest daughter, Elfrida, married a man named Packard, and his youngest daughter, Jane, studied at the Sorbonne in Paris.⁴ It was his middle daughter, Virginia, who followed most closely in her father's footsteps. After attending Manual Training High School, the University of Colorado (1913 – 1915), and the University of Pennsylvania premedical (1915 – 1917), she was awarded the MD degree by that institution in 1922.¹³ Her photo (Fig. 12)



FIGURE 10. Operating room, Denver General Hospital, 1931. Reprinted with permission, Denver Public Library, Western History Collection, No. X-28583, all rights reserved.



FIGURE 11. The surgical wing of Denver General Hospital on 6th Avenue, circa 1930–1940. Reprinted with permission, Denver Public Library, Western History Collection, No. X-20559, all rights reserved.

in *The Scope*, the yearbook in 1921, reveals her at age 25 to have attractive features and an intelligent expression. After additional training at Robert Packer Hospital in Sayre, PA, she returned to Denver in 1925 to practice with her father, becoming the first female surgeon in Colorado. In 1927, she surprised friends by completing an operation, then walking from the hospital to a church where she married the prominent surgeon Dr William C. Finnoff. In 1929, her husband developed appendicitis, and the Denver Post on March 29 made much of the fact that Virginia, along

with her father, Dr S. D. Van Meter, together operated on William to save his life.¹³ Not only did she practice medicine with her father, her home at 1621 Court Place was only a block from her father's former house. Tragically, her husband preceded her in death, and their only son, Seymour, was killed in a plane crash on December 1, 1946. After practicing medicine in Denver for 25 years, during which time she witnessed countless medical innovations, she moved to Tucson. She suffered a heart attack and died at the Medical Center on August 31, 1962, at age 66.



FIGURE 12. Virginia Van Meter, 1921. Reproduced with permission, Archives of the University of Pennsylvania, all rights reserved.

The Legacy

Dr Seymour Van Meter served in 1929 as president of the organization that later would be known as the American Thyroid Association. In that day, most of the members were surgeons. Only later, after the introduction of radioiodine and various medical treatments for thyroid diseases, did the membership shift largely to internists and endocrinologists. Dr Van Meter donated a sum of money to support the annual award that bears his name, and he knew the first awardee, another surgeon, Dr William F. Rienhoff, Jr, who went on to a long career at Johns Hopkins.¹⁴

In January 1934, at age 68, Dr Van Meter was stricken with cancer, and he died the next month at St. Luke's Hospital. The obituary, which appeared on page 1 of the *Denver Post* on that same day, Tuesday, February 27, stressed that he had devoted his lifetime to the advancement of medical science.⁴ The newspaper did not mention his wife, so she may have preceded him in death. The obituary stated that, "During his last conscious hour he requested his daughter, Dr. Virginia C. Finnoff, to arrange for an autopsy that will enable his colleagues to discover the cause of his malady and asked that immediately thereafter his body should be cremated, without funeral services."⁴ This was done at Riverside cemetery crematory that same afternoon.

Every life can teach a lesson, and the life of Dr Van Meter teaches many. We all can try to emulate his roles as head of a family and skillful and hardworking medical practitioner. We can admire his rise from small town obscurity and wonder if we would have had such courage in the 19th century to study far from home and begin new ventures in unfamiliar cities. We can envy his good fortune of being blessed with children, including one who was a bright child who understood and shared his art. But perhaps we especially should take note of the service he provided to many organizations and to his faith in the importance of science to humanity. I suspect that his autopsy failed to advance medical knowledge very much, in spite of his brave wish. But his generous donation, which established the Van Meter Award, definitely has played an important role over many years to encourage and reward young scientific investigators in the thyroid field.

ACKNOWLEDGMENTS

Deserving of special thanks for helping me obtain materials are Nancy R. Miller of the University of Pennsylvania Archives, Judy Brown and Coi Drummond-Gehrig of the Western History/Genealogy Department of the Denver Public Library, Bobbi Smith of the American Thyroid Association, and John Brinkley of the Hampden-Sydney College Archives.

REFERENCES

- 1. Oakville Texas! Available at: http://www.geocities.com/oakvilletx/?200612. Accessed November 12, 2006.
- Handbook of Texas online, Live Oak County. Available at: http://www.tsha.utexas.edu/ handbook/online/articles/OO/hlo4.html. Accessed November 10, 2006.
- 3. Archives of Hampden-Sydney College, Hampden-Sydney, Virginia.
- 4. Dr. Van Meter dies and leaves body to science. *Denver Post.* February 27, 1934.
- University of Pennsylvania Archives, Philadelphia, PA. Alumni records collection. Folder title: Van Meter, Seymour Doss, MD, 1889.
- 6. St. Anthony Hospitals, our history, 2005. Available at: http://www.stanthonyhosp.org/

index.php?s=history. Accessed November 13, 2006.

- Denver Public Library western history photos. Available at: http://photowest.org/cgi-bin. Accessed November 17, 2006.
- Dinsmore RS. Adrenalin sensitization test for hyperthyroidism. In: Rowland AF, ed.*The Thyroid Gland Clinics of George W. Crile and Associates*. Philadelphia: W. B. Saunders; 1922:99–104.
- Crile GW. Surgery vs. x-ray in the treatment of hyperthyroidism. In: Rowland AF, ed. *The Thyroid Gland Clinics of George W. Crile and Associates*. Philadelphia: W. B. Saunders; 1922:185–194.
- Crile GW, Lower WE. The technic of operations on the thyroid gland. In: Rowland AF, ed. *The Thyroid Gland Clinics of George W. Crile and Associates*. Philadelphia: W. B. Saunders; 1922:223–252.
- Christie CD. The value of basal metabolism studies in exophthalmic goiter. In: Rowland AF, ed. *The Thyroid Gland Clinics of George W. Crile and Associates*. Philadelphia: W. B. Saunders; 1922:141–158.
- Goff WR, Rushing EO. Preoperative management of exophthalmic goiter. In: Rowland AF, ed. *The Thyroid Gland Clinics of George W. Crile and Associates*. Philadelphia: W. B. Saunders; 1922:195–199.
- University of Pennsylvania Archives, Philadelphia, PA. Alumni records collection. Folder title: Van Meter, Virginia Cunningham, MD, 1921.
- Longmire WP, William F, Rienhoff Jr. A notto-be-forgotten mentor. *Surgery*. 2001;129:110– 113.