

President Reagan's Life Saving Colectomy and Subsequent Historical Implications

*2d Lt Robert H. Sorensen, USAF MC; 2d Lt G. Strider Farnsworth, USAF MC;
2d Lt Jared E. Roberts, USAF MC; Col David R. Welling, USAF MC (Ret.);
COL Norman M. Rich, MC USA (Ret.)*

INTRODUCTION

It has been almost three decades since our country saw its President subjected to a life-saving right colectomy for colon cancer. Presidential health care is often the subject of criticism and perhaps excess scrutiny, and the history of this operation is no exception. We will explore the interesting details of the way this colon cancer was discovered, the method of treatment, and the ultimate result. A principal member and leader of President Reagan's surgical team, Dr. John E. Hutton, was occasionally heard to say lightheartedly that this colectomy saved the free world (Interview with John E. Hutton, May 10, 2011, Uniformed Services University, by Farnsworth, Roberts, Sorensen). Rightly proud of the excellent result achieved, one can still wonder whether a delay in diagnosis could have led to a much less favorable outcome for our President. Had the medical outcome been different, President Reagan's second term in office may have gone much differently. These sorts of thoughts are those which dwell in the mind, and even years later, lead to conjecture and debate. This article will put this operation in its historical context, and comment on how, in fact, it may have literally changed history.

BACKGROUND

The Cold War years were a time of concern and worry for Americans, over several decades. Back in the 1950s, young children were schooled in dropping to the floor and getting under their desks in anticipation of an atomic attack. Attitudes about Russia evolved over the years, but the world faced continued heightened international tension and arms competition because of the Cold War. The United States and the noncommunist world viewed this new age war as a threat to world peace and democracy.

When President Ronald Reagan was inaugurated on January 20, 1981, the only blemish on his medical record to speak of was benign prostatic hypertrophy, with occasional episodes of prostatitis.¹ He lived a healthy lifestyle with regular exercise, working outside on his ranch, and riding horses. Occasional physical examinations did not reveal any evi-

dence of disease.¹ However, on March 30, 1981, the President was shot as he was leaving a speaking engagement at the Washington Hilton Hotel. The bullet ricocheted off a car before entering his left thorax. He was taken to George Washington Hospital where he received a life-saving thoracotomy. This event, although close to disastrous, would prove to have an impact on the Cold War, our country's history, and President Reagan's personal future.

As a result of the injuries he sustained, the President began receiving routine screening and monthly labs to monitor his overall health even after his recovery. These screenings would prove crucial in the future detection, diagnosis, and eventual treatment of his colon cancer.

DR. JOHN E. HUTTON

Colonel John E. Hutton recounts in an interview that he was a vascular surgeon serving as a Chief of Surgery at Letterman U.S. Army Medical Center in California when the assassination attempt occurred. He subsequently came to Washington, DC, and was Chief of Surgery at Walter Reed U.S. Army Medical Center for several years. In 1984, he received a phone call from longtime friend, then U.S. Army Surgeon General, Bernard Mittermeyer, who asked him to interview for a position as one of President Reagan's personal physicians. Dr. Hutton recalls responding with disbelief—exclaiming that he was from Long Island and did not belong in the White House. Nevertheless, he interviewed for the position and in December 1984 was selected as assistant physician to the President. Shortly after beginning his new position, Dr. Hutton chose to review President Reagan's medical history. As he examined the monthly labs, he noticed a worrisome pattern. President Reagan's hematocrit had been slowly dropping over the previous several labs. Alarmed, Dr. Hutton took his findings to Dr. Daniel Ruge, a neurosurgeon who was the lead physician at the time. Surprisingly, Dr. Hutton's discovery was met with resistance. In an interview, Dr. Hutton recalls his interaction with Dr. Ruge when he was told, "look at him, he's running around, riding his horses. He's in fine shape. I don't want to hear any more about it."

In January 1985, Dr. Ruge declined a second term as White House physician. As an experienced neurosurgeon and expert in spinal cord disorders, it was uncommon that his talents were put to proper use. He expressed this frustration by saying that the position was "...vastly overrated, boring and not medically challenging."² This opened the door

Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814.

This article was presented in a poster format at USUHS Research Days in Bethesda, MD, May 14, 2012.

doi: 10.7205/MILMED-D-14-00034

for Dr. Hutton to take over and begin what he called “the experience of a lifetime.”³ In March 1985, after Reagan’s stool tested positive for occult blood, a flexible sigmoidoscopy was performed and a small benign polyp was discovered. Interestingly, it was around this time that Reagan’s brother Neil Reagan was diagnosed with a colonic neoplasia, for which he was treated surgically. However, “. . .because of administrative commitments and political considerations, further examinations [on the President] were not done at that time.”¹ Fortunately, Dr. Hutton found a powerful ally in the White House, Mrs. Reagan, who noticed that he had been fixating on something in the President’s charts. In an interview, Dr. Hutton recalled explaining the concept of occult bleeding and his concern over the falling hematocrit levels. He emphasized that it was only with her help they were able to convince the President of the necessity to perform a colonoscopy.

THE OPERATION

At that time, colonoscopy was fairly new and was not the standard of care following a positive hemoccult test result. For this reason, President Reagan had only been evaluated via sigmoidoscopy, which had discovered only benign polyps in the distal colon. Even with his position as White House physician, it took 1½ years for Dr. Hutton to convince Nancy Reagan, and thus President Reagan that a colonoscopy should be performed.⁴ This procedure was completed at the National Naval Medical Center (Bethesda) on Friday, July 12, 1985. The colonoscopy revealed a villous tumor with an ulcerating core in the cecal region of the President’s colon. A biopsy was taken, and the tumor was determined to be carcinoma. It became evident that surgical intervention and exploration would be necessary to remove it, and to rule out metastasis. President Reagan elected to return for the operation the next day to avoid repeating the painstaking colonic preparations. Before the operation, President Reagan informally invoked the 25th amendment, which had been ratified out of necessity in 1967 as a result of President Eisenhower’s stroke. This action transferred presidential power to Vice President George Bush for a total of 7 hours and 50 minutes the day of the operation.^{4,5}

Beginning at 11:48 a.m. on July 13, 1985, a surgical team comprised of doctors John Hutton, Dale Oller, Lee Smith, and Bimal Ghosh performed a right hemicolectomy with the removal of the right colon up to the mid transverse colon, approximately 2 feet in length.⁵ Mesenteric tissue of the resected portion of the bowel was carefully studied, and no vascular or lymphatic metastasis was found.¹ The abdominal cavity was explored for signs of metastasis in other areas including the intestines, liver, and spleen.⁵ After 2 hours and 52 minutes, the surgery was completed without complications. Blood lost during the operation was estimated at only 150 mL.⁴ After finishing the surgery, Reagan’s surgeons commented that “he had the insides of a 40-year-old.”⁴ Anastomosis of the colon was completed via end-to-end

ileocolostomy.¹ The pathology of the tumor was classified as T2N0MX adenocarcinoma arising in a 5-cm tubulovillous adenoma of the cecum, or Dukes stage B.¹ The President was placed under general anesthesia for the duration of the operation.⁵ It was while the President was still in the hospital that Dr. Steven Rosenberg announced the results of the pathology report to the media, stating, “the President has cancer.” This caused a stir in the media and also in the public. He was subsequently asked by the White House not to discuss the case reports with reporters.⁶

RESULTS AND FINDINGS

Pathologists studied 45 different areas of lymph tissue from the surgical specimen, which included portions of the terminal ileum, appendix, cecum, right colon, and proximal transverse colon in search of evidence for metastasis. The following is the pathological report of the study:

Located in the cecum is an irregular friable gray-tan sessile tumor, 5.0 × 3.42 × 3.15*cm, with everted margins and focally eroded and ulcerated areas. On cross section, pale and firm areas are found to extend into the muscularis. The periphery of the lesion is velvety and papillary in areas. The lesion extends around the orifice of the appendix and extends superficially along the adjacent ileocecal valve. The inflow tract between the ileum and cecum is narrowed but not obstructed. The lesion occupies about 2/3 off the mucosal surface of the cecum, and is 6.6 cm from the distal resection margin. The serosa overlying the tumor is pale and nonadherent, and the serosa, muscularis, and mucosa elsewhere are unremarkable. (Dukes Stage B or American Joint Committee on Cancer Stage II.)

Although carcinoma extends into the muscularis externa, it is confined within the muscularis. No evidence of the vascular or lymphatic extension is evident. Areas of transition from the tubulovillous adenoma to carcinoma are clearly demonstrable, and adenomatous areas extend around the orifice of the appendix. Foci of *in situ* carcinoma extend partially over the ileocecal valve (Figs. 1 and 2). The two other polyps observed are histologically benign (Fig. 3).¹

The President’s pain was controlled postoperatively with morphine injected into the epidural space via epidural catheter in order to avoid the sedating effects of systemic narcotics.⁵ The goal was to enable Reagan to resume his presidential authority, which had been temporarily transferred to

*The dimensions listed in the original Beahrs article are 5.0 × 34.2 × 31.4 cm, which appear to be a typographical error, as a 5.0 × 34.2 × 31.4 cm rectangular tumor of the cecum is anatomically very improbable. Because the original pathology report has not been released, we decided it appropriate to assume the error and correct it by changing the last 2 numbers by a tenth.

Vice President Bush. Postsurgical lab values returned normal, and the President was afebrile. Upon arousal, Reagan was transferred from the recovery room to the presidential suite of the hospital, where he reclaimed his presidential authority, and reported feeling “fit as a fiddle.”⁵ On July 17, 1985, he was taken off of parenteral nutrition, and placed on a liquid diet. The next day, July 18, 1985, he was back to eating solid foods, and incisional skin staples were replaced with adhesive strips.⁵ Reagan was flown by helicopter back to the White House on July 19, 1985 (6 days after the surgery), gradually increasing his physical activity over the ensuing 6 weeks.^{1,5} His postoperative course was smooth and uneventful. Later, evidence for malignant recurrence was watched closely.¹

LONG-TERM EFFECTS OF SURGERY

Reagan had follow-up CAT scans every 6 months after his 1985 cancer surgery. Colonoscopy was repeated several times by Dr. Robert Beart, a distinguished Mayo Clinic colorectal surgeon. One colonoscopy, done on January 4, 1987, showed a well healed and completely patent anastomosis, with no evidence of recurring malignancy. Three small benign sessile polyps only a few millimeters in size were identified and removed. CEA levels were closely followed from May 1986 to June 1989, which consistently remained below 3 ng/mL.¹ President Reagan would continue to be routinely evaluated for the rest of his life and while he suffered from many other medical conditions, there is no evidence that he suffered any further sequelae from his cancer or the operation to remove it.

HISTORY MADE AFTER SURGERY

On January 21, 1985, Ronald Reagan was sworn in as President of the United States of America for his second term. During his first term as President, he was credited with helping the economy recover from the highest unemployment our country had seen since the Great Depression. America’s morale was improving, people were going back to work, and they had a man in office that had fulfilled his promises to help America. With the economy recovering, the greatest issue plaguing the minds of the American people and the center of much of the 1984 presidential campaign was the uncertainty of the Cold War. There were six presidents before Reagan that had tried and failed to improve relations between the USA and the USSR, and few believed it could ever be done. The American people had confidence in Reagan’s influence as President, and decided to grant him another 4 years at the plate. The 1984 election results had the President carrying 49 out of the 50 states.

Many historians regard Reagan as the greatest president of the 20th century based on what he did in ending the Cold War.⁷ The President’s second term, 1985–88, was a pivotal time in the history of America and the legacy of the President. It was during this period that the events and forces were set in motion that would culminate with the ending of the Cold War. To understand how incredible a feat it was to

end the Cold War, one must appreciate the worldwide threat posed by the long struggle for global supremacy between the world’s two super powers, the USA and the USSR. Shortly after World War II, the two ideologically incompatible nations, capitalism and democracy on the one hand, and communism and totalitarianism on the other, had engaged in a deadly and uncontrolled arms race. By 1985, the USA and Russia had stockpiled in excess of 62,000 nuclear weapons, or 98% of the world’s total supply.⁸ For decades, many feared the two countries would inevitably end their differences with nuclear force. When President Reagan talked about defeating the USSR and ending the Cold War during his 1984 campaign, few people believed it could be done. The very same year the President was sworn in to office, he was diagnosed with Duke stage B colon cancer and underwent the hemicolectomy mentioned previously. Only 5 months after the operation, still in the year 1985, the President was in good health, and in Geneva, Switzerland, to meet Mikhail Gorbachev for the first time.⁹

During that meeting, against all odds, the two most powerful men in the world developed a friendship. The following year in Iceland, the two men were able to agree to a reduction in arms. The year after that, in June of 1987, at the Berlin Wall, a robust and physically imposing Ronald Reagan made his famous speech (Fig. 1) calling for Mr. Gorbachev to “tear down this wall.”⁹ Many historians agree that this speech and the power of its delivery resonated in Eastern Europe and deserves much of the credit for the fall of the Berlin Wall and subsequent events which ultimately lead to the dissolution of the USSR.¹⁰ By 1989, the Berlin wall was destroyed, many Eastern Bloc countries had abandoned communism for democracy, and the USSR had retreated out of Afghanistan. In 4 short years, the world became a more stable place for many who for so long had lived in fear.⁹



FIGURE 1. June 12, 1987—Ronald Reagan speaks at the Brandenburg Gate in Berlin, Germany.

But what if Ronald Reagan had never met with Gorbachev in 1985? What if it had been George Bush instead? Would they have formed such a friendship? Would the two countries still be on the brink of a nuclear war? Without Reagan's bold declaration at the Brandenburg Gate in 1987, would the Berlin Wall still be there today? How would the outcomes have been different without a healthy president leading our country?

In 2011, President Hugo Chavez of Venezuela was diagnosed with a cancer in the pelvic area, very possibly from a perforated rectal cancer. After diagnosis, he underwent chemotherapy, radiation, four surgeries, and finally passed away in March of 2013. President Chavez spent much of the 2 years before his death in Cuban hospitals, and very little time running a country.¹¹ Even in this modern day with our advanced medicine, cancer is still a very debilitating disease and situations like those of Chavez are at times the rule rather than the exception. It is not hard to imagine that a similar fate could have easily befallen President Reagan when he was diagnosed with cancer in 1985, especially without many of the modern technological advances that we enjoy today. Had it not been discovered early, the implications on Reagan's health, as well as our world's history, may have been changed drastically.

SUMMARY

The discovery and treatment of President Reagan's colon cancer was arguably a true seminal event in our recent history. It is easy to see that if Reagan had been out of commission, frail, or in declining health for any extended period of time during his second term as president, the world you and I live in could have been dramatically different. He was an essential part in ending the Cold War and bringing down the Berlin Wall. Reagan's health and vigor enabled the accomplishment of the policies and actions of his administration. There is no way to know what may have happened to President Reagan without his surgery and speedy recovery in 1985. However, early diagnosis and skilled surgeons most likely saved his life, and allowed Reagan to continue his presidency healthy and strong. Whatever the

reader's view may be of President Reagan's accomplishments during his second term in office, it is clear that his personal physician, Dr. John Hutton, played a key role in those achievements.

REFERENCES

1. Beahrs O: The medical history of President Ronald Reagan. *J Am Coll Surg* 1994; 178: 86–96.
2. Altman LK: Daniel Ruge, 88, Dies; Cared for Reagan After Shooting. *The New York Times*. September 6, 2005. Available at <http://www.nytimes.com/2005/09/06/politics/06ruge.html?pagewanted=all>; accessed January 5, 2012.
3. Hedger B: White Coats in the White House: Former Presidential Physicians Reflect on Their Service. American Medical Association—Physicians, Medical Students & Patients (AMA). March 23, 2009. Available at <http://www.ama-assn.org/amednews/2009/03/23/prsa0323.htm>; accessed January 15, 2012.
4. Wiedeman JE: Presidential operations: medical fact or urban legend? *J Am Coll Surg* 2009; 208(6): 1132–7.
5. Abrams HL: The President Has Been Shot: Confusion, Disability and the 25th Amendment, pp 202–6. Stanford, Stanford University Press, 1994.
6. Doctors Have a Tense Debate: Reagan 'Has' or 'Had' Cancer? *Los Angeles Times*. July 20, 1985. Available at http://articles.latimes.com/1985-07-20/news/mn-5861_1_cancer-experts; accessed July 30, 2013.
7. Guppy P: Great Communicator” Greatest President of the 20th Century. Washington Policy Center. June 2004. Available at <http://www.washingtonpolicy.org/publications/opinion/great-communicator-greatest-president-20th-century>; accessed July 30, 2013.
8. Table of Global Nuclear Stockpiles, 1945–2002. Natural Resources Defense Council. November 25, 2002. Available at <http://www.nrdc.org/nuclear/nudb/datab19.asp>; accessed July 30, 2013.
9. Ronald R: The Ronald Reagan Presidential Foundation and Library. Available at www.reaganfoundation.org; accessed August 4, 2013.
10. Burt R: Tear Down This Wall. Atlantic Council. November 13, 2009. Available at http://www.acus.org/new_atlanticist/tear-down-wall; accessed July 30, 2013.
11. Knowles D: Hugo Chavez loses battle with cancer, dies at the age of 58; Venezuelan president was reviled as a power-hungry dictator, but also loved as a champion of the poor. *The Daily News*. March 6, 2013. Available at <http://www.nydailynews.com/news/world/hugo-chavez-loses-battle-cancer-dies-age-58-article-1.1280191>; accessed August 4, 2013.