



Surreptitious Surgery on Long Island Sound

The Oral Cancer Surgeries of President Grover Cleveland

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"Cleveland drunk is a more valuable asset to this country than the whole batch of the rest of our public men sober."

Samuel Clemens¹

Abstract

Grover Cleveland rose from being the mayor of Buffalo to the governor of New York to the president of the United States. At the start of Cleveland's second term as president, the nation was involved in a severe financial crisis, the extent of which was not known by the general public.

President Cleveland was to make a strong appeal to Congress in the coming months to repeal the Sherman Silver Purchase Act of 1890. He thought this would set the nation on the road to fiscal recovery. However, his vice president, Adlai Stevenson, strongly opposed repeal of the Sherman Act. Prior to scheduling his appearance before Congress, President Cleveland noticed a rough spot on his palate. A biopsy confirmed that it was cancer, and it was determined that surgery was needed. Cleveland and his advisors thought the nation would be thrown into a panic if the President's health did not remain a secret.

A surgical team, which included a dentist, performed the surgery in secrecy while traveling aboard a yacht. A prosthetic obturator was fabricated by a New York prosthodontist to close the surgical defect. Cleveland recovered well, made a forceful speech before Congress, had the Sherman Act repealed and lived without a recurrence of his oral cancer for the rest of his life. The public remained unaware, for the most part, of the gravity of President Cleveland's health for decades.

IN 1893, THE UNITED STATES was suffering through a terrible financial crisis. The president, Grover Cleveland, was enduring his own personal health crisis.

The nation's leaders and economists were divided on the issue of backing the American currency by both gold and silver. The Sherman Silver Purchase Act of 1890 called for United States Treasury notes to be redeemed in either gold or silver. It also mandated that the United States Treasury purchase a large amount of silver monthly. Silver prices declined and the Treasury's gold supply was becoming depleted. President Cleveland strongly favored repeal of the Sherman Silver Purchase Act of 1890. His vice president, Adlai Stevenson, was a staunch silver advocate. Cleveland planned to make a strong appeal to Congress to repeal the Act.

In March of that year, Cleveland noticed a rough spot on his palate. The lesion was examined. It was determined to be cancerous and surgery was strongly recommended. Due to the grave financial situation of the time and the fact that Stevenson would assume the presidency if Cleveland died or became unable to fulfill the duties of the Office of the President, it was decided that the surgeries to be performed on President Cleveland would remain a secret from the American people.

A clandestine surgical team, sworn to secrecy, was assembled. A dentist was chosen to be part of this team. The surgery was successful. A New York prosthodontist constructed a maxillofacial prosthesis to close the surgical defect. This prosthesis enabled Cleveland to later address Congress as planned, and the Act was repealed. The cancer was formally diagnosed many years later, in the 20th century, when slides of the lesion were examined using modern equipment and techniques. It was determined to be verrucous carcinoma.

Dentists today, as in the day of Cleveland, play an integral role in the diagnosis and treatment of all forms of head and neck cancer and in the postoperative reconstruction of the patient. The only difference in the case of Cleveland's cancer is that the fate of a nation lay in the hands of the few individuals performing the surgery and reconstruction.

Grover Cleveland

Grover Cleveland was born in New Jersey in 1837, the son of a Presbyterian minister. He was raised in upstate New York and practiced law in Buffalo. He became mayor of Buffalo in 1881. A year later, he was elected Governor of New York State.

Cleveland was elected president in 1884 and became the only president to be married in the White House when, in June 1886, he married 21-year-old Frances Folsom. He also became the only president to serve two non-consecutive terms, winning the presidential election of 1892 and, thus, becoming the nation's 22nd and 24th president.²

In retirement, Cleveland lived in Princeton, NJ. He died there of a myocardial infarction in 1908.³

The Surgeries

On Sunday June 18, 1893, Dr. R.M. O'Reilly, the future Surgeon-General of the United States Army, examined a rough area on President Cleveland's palate. The lesion was classified as being the size of a quarter dollar and extended from the maxillary molars to within one-third of an inch of the midline, encroaching slightly on the soft palate. Some diseased bone was also noted.

Dr. O'Reilly sent a specimen to the pathologist at the Army Medical Museum. The patient's identity remained unknown to the pathologist. The pathologist indicated that the specimen was highly indicative of malignancy. Surgery was subsequently recommended to President Cleveland.

On the night of June 30, 1893, President Cleveland, the surgical team and a small entourage boarded the yacht "Oneida," owned by President Cleveland's close friend Commodore Elias Benedict. The surgical team included Dr. Joseph Bryant, a prominent New York surgeon; Dr. William Keen, professor of surgery at Jefferson College; Dr. John Erdmann, recruited to act as a surgical assistant; Dr. Edward Janeway, a prominent New York internist; and Dr. Hasbrouck, a New York dentist, who would administer the anesthesia.⁴

On the morning of July 1, 1893, the "Oneida" set sail, traveling half speed up the East River of New York City. The surgical team members retreated to the cabin of the yacht as it passed Manhattan's Bellevue Hospital, so as not to be recognized by any hospital staff.⁴ The surgery commenced and Dr. Hasbrouck extracted President Cleveland's maxillary left first and second premolars under nitrous oxide. Dr. Bryant then made incisions in the palate, also under nitrous oxide. Dr. Janeway continuously monitored Cleveland's pulse and general condition.⁴ Topical and injected cocaine were administered and supplemented with ether.³

Dr. Bryant, assisted by Dr. Keen and Dr. Erdmann, resected the left maxilla.⁵ The remaining left maxilla, exclusive of the medial wall and infraorbital plate, was removed once it became obvious that the tumor had invaded the maxillary antrum and involved the floor around the roots of the molar teeth.⁵ This procedure was performed in a piecemeal fashion and the cavity was packed with iodoform gauze.⁴ Hemostasis was obtained using pressure, hot water and galvanocautery.

This procedure was performed in 1 hour and 20 minutes and the patient tolerated it well.

At 2:55 p.m., an injection of one-sixth of a grain of morphine was administered. This was the only narcotic given to Cleveland.⁴

President Cleveland was able to get out of bed late in the day on July 2 and was active aboard the yacht the entire day on July 3. Dr. Hasbrouck, the dentist, was let off the "Oneida" in New London, CT, on July 2. Dr. Keen left the yacht on July 4 at Sag Harbor, NY. President Cleveland arrived at his home, Gray Gables, in Buzzard's Bay, MA, on July 5 and walked from the launch to the house with little apparent effort.⁴

A second, smaller surgery was performed on President Cleveland on July 17 by Dr. Bryant to remove a small residual lesion.

In addition to Dr. Bryant, the surgical team for the second surgery consisted of Drs. Janeway, Erdmann and Keen. It was also performed aboard the “Oneida” while Cleveland was at Gray Gables. The surgical team boarded the “Oneida” this time at Commodore Benedict’s house in Greenwich, CT. The entire surgery was performed intraorally to avoid an external scar. The surgeons gave much credit to a cheek retractor, which was purchased by Dr. Keen in Paris in 1866.

Cleveland continued spending summers at Gray Gables until 1904, when his dear daughter Ruth (for whom the candy bar “Baby Ruth” was named) died of diphtheria at age 13. Cleveland never returned to Gray Gables again.⁶

Postoperative Treatment

Cleveland’s first surgery left a large defect in his mouth. A New York prosthodontist, Dr. Kasson C. Gibson, fabricated a prosthesis for Cleveland out of vulcanized rubber. This was made while Cleveland was at Gray Gables. It supported the cheek and did not appear to alter Cleveland’s speech when in place.⁴ In October 1893, Dr. Gibson fabricated a second prosthesis for Cleveland, which the President treasured.

Today, a simple acrylic plate known as a surgical obturator would be screwed in the mouth during surgery to cover the defect. The purpose of such a surgical obturator is to support the medicat-

ed packing, lessen pain, enable the patient to swallow fluids and talk, and protect the wound. About 10 days later, a second prosthesis would be fabricated, which would include any necessary prosthetic teeth. Six months later, a final prosthesis would be inserted. It would be similar to a removable partial denture and would consist of acrylic and a metal framework.⁷

White House Cover-Up

The White House felt it would be in the best interest of the nation to keep the state of Cleveland’s health a secret due to the existing financial crisis and the panic that would ensue if the truth was revealed. Before giving permission for any surgery to be performed, President Cleveland demanded that three conditions be met. They were: 1. The surgical team must be sworn to absolute secrecy so that no public disclosure would be made of the surgery; 2. Cleveland must be able to address Congress within two months; and 3. The surgery would be performed on the yacht of his friend Commodore Benedict while traveling. The saloon of the yacht would be transformed into an operating theater.³

Despite all the precautions taken to prevent the public from learning the truth about Cleveland’s health, a very accurate account of the cancer was published in the Philadelphia Press on August 29, 1893.⁸ It is thought that Dr. Hasbrouck leaked the story. This story was vehemently denied by the White House and by President

Cleveland's physicians. This denial, along with Cleveland's outwardly unaffected appearance, reassured and satisfied the public.

The first official acknowledgement of Cleveland's cancer was when Dr. William Keen published his recollections of the details surrounding the surgeries in *The Saturday Evening Post* on September 22, 1917. This was only done after asking for permission from Mrs. Thomas J. Preston Jr., the former Mrs. Grover Cleveland. Permission was granted after a personal interview was conducted.

Verrucous Carcinoma

Lauren Ackerman first described verrucous carcinoma (VC) in 1948.⁹ Ackerman said this lesion has both a distinctive morphologic appearance and clinical behavior. He went on to say it should be separated from other epidermoid carcinomas because, with proper treatment, there is an excellent prognosis, even in extensive lesions.

VC is a relatively rare variant of well-differentiated squamous carcinoma, which has a predilection for mucous membranes of the head and neck. It is most commonly found in the oral cavity, followed by the larynx.¹⁰

The primary etiologic factor for oral cavity lesions is chewing tobacco.¹⁰ VC is also typically associated with alcohol.⁸ Cigarette smoking is highly correlated with laryngeal lesions but has not been identified as an etiology for oral lesions, while HPV is thought to play a possible role in the development of the disease.¹⁰

VC occurs most frequently in elderly men.⁴ It is most prevalent in India,⁵ where "pan," a mixture of betel leaf, lime, betel nuts and tobacco, is chewed habitually.¹¹ The diagnosis of VC can be difficult, as verrucous hyperplasia (VH) can exist concurrently with VC⁵ and is clinically indistinguishable from VC.⁶ According to Shear and Pinborg,¹² VC is characterized by the extension of the lesion into the underlying connective tissue deep to the adjacent normal epithelium.

The recommended treatment options have not changed much since the days of Ackerman. Surgery or radiotherapy has been used to treat both oral cavity and laryngeal lesions, with the surgical option being the most effective.¹⁰ However, Schwade et al.¹³ and Burns et al.¹⁴ have achieved equally good results using radiation to treat laryngeal VC.

Today, there are more advanced methods to close the defect in the oral cavity resulting from the surgeries than there was when President Cleveland's surgeries were performed. Aytakin et al. describe their success in reconstructing an oral cavity defect resulting from VC with a prefabricated parietal galeal flap.¹⁵ Also, the prognosis for treated VC is usually excellent. Nevertheless, careful follow-up examinations are indicated, as VC presents the potential for local recurrence.¹⁶

Conclusion

The surgeries performed on President Grover Cleveland in the 19th century illustrate a myriad of lessons that are as pertinent today as they were over a century ago. Cleveland's cancer demonstrates the vital importance of oral cancer examinations, along with thorough head and neck examinations.

Today, as opposed to in Cleveland's time, dentists routinely and regularly perform these examinations on their patients. This, coupled with early treatment of cancerous lesions, saves an untold number of lives annually.

The magnificent work of Cleveland's prosthodontist, Dr. Kasson C. Gibson, was prelude to the image-restoring, confidence-giving treatment rendered today by dental professionals who fabricate various maxillofacial prostheses for patients who have suffered from the ravages of head and neck cancer.

The impact Cleveland's surgical and restorative team had on both Cleveland and the entire nation provides a portal into the gravity and responsibility that has been entrusted to the dental profession in providing proper oral cancer education, examinations, diagnoses and treatment to the public. ■

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