

**I will let Abraham Lincoln intone the final words:**

**The dogmas of the quiet past  
Are inadequate to the stormy present.  
As our case is new,  
So we must think anew  
And act anew.**

### **Health Issues of Lincoln's time:**

By Richard P. Holm MD

There is hardly a real hero in the American experience as inspiring as Abraham Lincoln, but his life story was not something anyone would like to live. During his existence on this earth, he faced poison, madness, a bizarre bodily form, the tragic death of two sons, and the misery of war. Here follows a saga of medical mystery that darkened Lincoln's life. It begs the question, what would have been different had he had available to him the medical armamentarium that we have today

### **The Milk Sickness**

In 1816 Tom Lincoln, the president's father moved his family to Pidgeon Creek settlement in Indiana, where their dear friends and neighbors died of what had been troubling the community for about ten years, referred to as "the milk sick". Not long after Abe's mom, Nancy Lincoln became milk sick as well, and after a long and miserable week of abdominal pain, vomiting, restlessness and trembling, and progressive deterioration, she died.

This mysterious illness that came to the people of the forest near the banks of the Green River was thought to be due to potions and poisons, and tied in a strange way to milk... but was not defined until a midwife Anna Bixby suggested the cause. She reportedly heard from a Shawnee Indian medicine woman that the illness was due to milk cows eating "White Snake Root", something in the woods that cows would eat when grass and good forage is not available. Still it was not until 1928 when the illness was officially defined.

This story tells us “exposure to an environmental toxin” is not a new condition, and as well, all that is “natural” is not necessarily safe.

## **Mental Illness**

Psychiatric disease affects many lives today. However, we commonly don't consider how the society of Lincoln's time reacted to such a thing, and how helpless they were to the ravages of mental illness.

Abraham Lincoln aged tremendously during his years in the Whitehouse with weight loss, wasting, receding hair. Was Abe struggling with severe depression? Many surmise his excessive aging was due to the huge responsibility of the war, the many losses of his life to include the death of two sons. I believe, however, we can call this a normal reaction to significant life losses, and not mental illness. In fact the most significant stressor on Lincoln during his time in the White House may have been due to someone else's mental illness, and that person was his wife Mary Todd Lincoln.

I submit that Mary was suffering from Bipolar Disorder. We have plenty of historical information to support such a claim. She was at least episodically an impressive dresser, an excellent hostess, and loved throwing and attending parties.

There is evidence however, that she had another side to her. Abe was unquestionably the victim of domestic violence at her hands when she struck him in the face and cut his nose with a piece of wood in 1860; struck him again in the face a year later, apparently angry at Abe's choice of meat for his guest; threw coffee at him on one occasion and potatoes at him at another. She chased him down the street with a broomstick more than once, and chased him with a knife one time. There is even a recorded instance where she pulled out part of his beard. Truly this is not an example of a typical or healthy relationship.

Mary not only illustrated unrestrained anger, but also struggled with overwhelming remorse following the many tragedies of her life. After her second son almost four year-old Edward Baker grew gravely ill, lingered for two months and then died, Mary collapsed in shock, shut herself in her room, and stayed there for weeks. She was called a “broken woman”. Twelve years later, eleven-year-old third son Willie, while living in the

Whitehouse, grew ill and died. Mary was inconsolable, and it was at this time she spent some time in an asylum for depression. And then there was the remorse that followed the assassination of her husband.

After Abe's death, Mary began wandering, and although couldn't afford a home in Chicago, took fourth son Tad with her to Germany. There she apparently sought out spiritualists and mediums to seek connection with her dead sons and husband. On the way home aboard ship, one more heartbreak was experienced, as Tad came down with painful breathing and died several months later. One might understand Mary's life filled with such repeated tragedy to respond with grief but an unusual event followed.

A few years after Tad's death, her son Robert Lincoln directed legal effort to have his Mother committed to a private mental institution outside of Chicago. It was said at the time that she was "not insane, and only stayed four months." What did that mean? Why would any son treat his grief-ridden mother that way?

Rather this was the picture of a son responding to a mother who was behaving in an irregular and inappropriate manner. When Mary was released, apparently she was convinced Robert would try to send her back to an institution and fled to southern France. One should note that Robert remained a productive, responsible, and respected person during his 83 years of life. There is nothing to suggest he was a vengeful son.

The evidence that Robert had to commit her once again suggests she was spending money beyond her means, or some other irrational activity. And then for Mary to have to escape from her son would suggest that something was very wrong with a relationship that should have been consoling for the both of them.

Most likely the destruction of this relationship between mother and son reflected the social stigma of mental illness during this era. We know in the mid 1800s there was a severely degrading and demeaning attitude towards anyone with mental health problems, and some of that persists today. Even now, with something like an 80% success rate in the treatment for depression and bipolar disease, there is still a social stigma, which prevents many from seeking and receiving mental health care.

After four more years, due to failing health, Mary returned to the US and stayed once again with her sister Elizabeth in Springfield, IL until her death of a stroke at 63 years of age.

Indeed Mary Todd Lincoln had a painful life of heartbreaking tragedy, all made exquisitely worse by her mental illness. It is interesting to speculate how Abraham and Mary Todd Lincoln's lives would have been different had Mary been mentally well or had there been our modern day medications to treat her mental suffering.

### **Inherited Conditions:**

Lincoln was 6 feet and 3 ¾ inches tall (7 ½ inches taller than average at that time) with long legs, long arms, long thin flat feet and thin and long hands, a long thin neck, a mildly sunken chest, which all support the possibility of Marfan Syndrome.

The evidence against Marfan's syndrome includes: 1) Lincoln's hand casts, which, if they were true to form, show Lincoln's hands as muscular and less likely Marfan's, which should be very thin and long in Marfan's; 2) no history for hernias, which are frequent in Marfan's; and 3) no history for visual problems except for common reading glasses after middle-age, while Marfan's syndrome carries with it an 80% chance of dislocation of the lenses of the eyes.

Some would argue he was more likely to have one of more than a dozen different medical conditions that causes this same kind of body shape (Marfanoid means Marfan-like) but is not Marfan's syndrome. One expert suggests that Lincoln had a rare condition called multiple endocrine neoplasia type 2B (MEN 2B), which is associated with the Marfanoid habitus, a type of thyroid cancer, an unusual high blood pressure condition called pheochromocytoma, and finally a strange nerve tumor condition of the bowels called ganglioneuromatosis.

The evidence for the MEN 2B condition is supported by the appearance of Lincoln's wasting away in the last 3 years of his life. A thyroid cancer associated with MEN 2B could have explained this rapid deterioration.

Of course much of this is speculation, but no question, Lincoln was either living with Marfan's syndrome, or marfanoid. We will never know what

would have happened had he not been assassinated, but it is a reasonable bet that he would not have lived long had the bullet not found his head in 1865.

### **Premature Death in the Lincoln Family**

Second son Eddie developed a gradually worsening illness that lasted about two months until he died at about four years of age. Some think it was Tuberculosis, as it lasted so long.

Third son Willie died while the family lived in the Whitehouse, and some suggested it was due to Typhoid Fever, an illness caused by Salmonella bacteria, and resulting from drinking contaminated water from the Potomac. Others speculate he died from Malaria.

Thomas or Taddie, who had a cleft lip, spoke with a lisp, and struggled with a learning disability, died at eighteen years old, six years after his Father's death, after a two-month progressive respiratory disease, which caused severe pleurisy or pain with taking a breath. Such a long illness most likely would have been Tuberculosis or cancer.

Of course the true causes for the deaths of these three are buried in their coffins.

### **Infections and Trauma During the Time of the Civil War**

One in four fighting in the Civil War died, which amounted to some 620,000 deaths. 360,000 died on the Union side, and 260,000 from the Confederate side.

On the Union side, 60% of the deaths were due to disease, not injury; and on the Confederate side 67% were due to disease. A full half of these deaths were from diarrheal illness like Typhoid and Cholera, related to the lack of clean water and adequate sewage disposal. One estimate was that one-quarter of non-combat deaths in the Confederacy resulted from Typhoid, a condition where food and water were contaminated by Salmonella bacteria.

The lack of sanitation and the shocking filth of the camps became the terrible killer of the Civil War. Thus malnutrition was rampant, not only

because of the lack of rations, but because 99% of the troops had a chronic diarrheal illness.

Although the smooth bored musket was the primary weapon at the beginning of the war, the rifled musket became quickly available as the war progressed. Recent advances in weaponry provided for cone-shaped bullets shot through rifled muskets with an impressive 300-500 yard range. This innovation caused mostly trauma to limbs (71% of all wounds). In the face of rapid-fire weapons, soldiers hid behind trees, rocks, earth-works, and therefore there were much fewer torso injuries, and more limb injuries. Also with the heavy bullet or miniball, any head, chest, or abdominal injury most assuredly resulted in death, and therefore no need for any further health care.

Most trauma surgery had to be performed during the first “golden” 24 hours, and happened in the field. This was in a tent in the open air with surgeons mostly trying to help with limb injuries. There was only minimal hand washing, no sterile gloves, and certainly no sterilization methods available to these surgeons at that time.

One description: “(The doctors) would work for days without washing. As he waited for the next man to be placed on the table, the surgeon would stand back near the recently amputated limbs, holding his knife in his boot or even in his teeth...” and “Infection was so common that a pus-producing (staph and strep) infection was thought to be a method of normal body repair.”

The decision to try to save the limb or to amputate was a matter of great debate. Once infected or later than 48 hours after injury, amputation was not an option. Efforts to clean out a wound, so called dirty exploratory surgery more often than not resulted in a higher chance of infection than leaving it alone. Still many efforts were made to try and save a limb. One description: “Soldiers naturally preferred trying to save the limb, often begging, bribing, or even demanding with the diplomatic leverage of a revolver to keep their limb.” Although the discovery that infection was spread by dirty hands occurred in 1847, it was only until after the Civil War in the 1870s that Joseph Lister helped spread the use of a sterile surgical technique.

Another description of the time was as follows: “Tables had been erected upon which the screaming victims were having legs and arms cut off. The surgeons and their assistants, stripped to the waist and bespattered with

blood, stood around, some holding the poor fellows while others, armed with long, bloody knives and saws, cut and sawed away with frightful rapidity, throwing the mangled limbs on a pile nearby as soon as removed.” This was pretty close to the visual picture presented in the movie “Dances With Wolves”.

Contrary to what was implied by this description, there was extensive and compassionate use of anesthesia at the time of the Civil War. Ether was first used as an anesthetic in 1842 by a rural doctor in Georgia, and then popularized in 1846 at the Ether Dome at Harvard. By 1861 chloroform, which was less flammable, less nauseating, and more portable (albeit more dangerous), mostly replaced ether, and was used extensively by the field surgeons of the Civil War. Records indicate general anesthesia was given 80,000 times, 76% of the time with chloroform, and there were only 43 anesthesia deaths during the entire war. Most believe the screaming came not from the mercifully anesthetized patients during surgical amputations, but rather from the wounded about to have surgery, crying from fear as they watched other soldiers’ limbs coming off, or were being carried to the operating table.

Despite all the complications of surgery during the Civil War, many lives were saved, and significant advancements occurred. Only one amputation occurred out of every six substantial limb injuries, and 75% of the soldiers with amputations lived; methods to control bleeding by tying off bleeding vessels were developed; the proper technique for anesthesia was developed and advanced; and probably most important, some 15,000 physicians became adept at providing surgery and anesthesia during their military service. After the war, these men found their way home throughout the country to even the most rural areas, and providing health care and, country-wide, advancing the cause of appropriate surgery.

During this time also came an appreciation by the doctors and the patients of the more than 4,000 women who served as nurses in the Union hospitals, and an unknown number of women who served the Confederate cause. This followed the example provided by Florence Nightingale in the Crimean War about ten years earlier. Thus came to pass a greater understanding of the value of a clean environment and an adequate diet, which would greatly enhance a soldier’s recovery from any injury or illness.

## **The Saga of Medical Mystery**

It is not difficult to put oneself into the timeline of Lincoln's life. These people faced social and governmental strife that was not too different from what we face today. Local, national, and international political differences still abound; psychiatric illness still wraps its miserable grip around innocent people; war is still with us, and even perhaps more vicious and debilitating.

But over these last one-hundred-plus years, the scientific method has solved many medical mysteries. Science has brought us to realize the hazards of environmental toxins; the power of psychiatric diagnoses and therapy; the genetic code and its medical potential; and the danger of the swampland of infection and infestation around us, and how to use cleanliness and effective medicines to our advantage.

Abraham Lincoln was a champion of his time, rising above great suffering to change his, and thus our lives in incredible ways. It boggles the mind to consider how modern medicine would have affected the world in which Lincoln lived!