Embalming Practices during the Civil War

Presented by Dean Petersen, 2013

Embalming practices date back to the early Egyptians but did not really come into practice in this country until the time of the Civil War. Prior to that time, embalming was done chiefly for medical students who studied the human body. Because of the use of toxic chemicals, medical students were at risk and some became sick or even died from being exposed to the chemicals during dissections. Chemicals included arsenic, creosote, mercury, turpentine and alcohol. Formaldehyde did not come into use until after the Civil War.

Doctor Thomas Holmes, an 1849 graduate of Columbia University, spent years researching safer means of storing cadavers. In the late 1850s he found what he believed to be a safe, non-toxic embalming fluid. It consisted of four ounces of arsenious acid (arsenic) to one gallon of water. The solution was sold to undertakers throughout the country.

Holmes gained prominence when he embalmed the first fatality of the Civil War, Colonel Ephrim Ellsworth. Ellsworth had worked for Lincoln in Springfield and later helped with the presidential campaign. Dr. Holmes offered his service for no charge. The body lay in state at the White House and then in City Hall in New York. Ten days after his death Ellsworth was buried in his home town, Mechanicsville, New York.

Holmes was commissioned as captain in the US Medical Corps and trained other embalmers. He performed his trade first in Washington, and then directly on the battle field. He would set up an embalming tent with a crude table, usually a door set up on a couple of barrels. Embalming was performed by squeezing a rubber ball to force the fluid through the artery of the deceased in the area of the arm pit. It was seldom necessary to drain blood from those killed on the battlefields. The process took about two hours.

Bodies along with personal effects were placed in a wooden box lined with zinc. The name of the deceased along with his parents' names and location were placed on the lid, and the body was sent home by rail.

It became common for soldiers to pin cards to their coats or shirts, or to wear a tin medal around the neck with their names and home towns, so they could be identified. Dog tags did not come into use until 1906.

The cost for embalming was \$50 for an officer and \$25 for an enlisted man. As the war went on, embalmers were in high demand, and fees went up to \$80 and \$30 respectively. Feeling he could make more money in the private sector, Holmes resigned his commission and began to charge \$100 for each embalming.

Surgeons and pharmacists became aware of profits made from embalming and often traded in their instruments and followed the troops to war. They would search first for officers, knowing their families would be able to pay higher prices for their services. Unscrupulous embalmers threatened to hold the bodies hostage if the family didn't pay.

Physicians even lined up customers before they went into battle. They provided soldiers with cards saying they had arranged payment and transportation fees if they died in battle. The Army put a stop to the practice because it was bad for the morale.

Holmes claimed to have embalmed around 4,028 bodies during the Civil War, but the carnage was far too great for all bodies to be so processed. Of the approximately 650,000 soldiers killed, about 40,000 were embalmed. Community members of those close to the battle fields had no choice but to go out and cover the bodies, or bury them in mass graves.

The embalming surgeon was found only in the North. It was not until after the War the practice of embalming moved to the South.

By the end of the War, the War Department issued General Order #39 Concerning Embalmers: "Hereafter, no persons will be permitted to embalm or remove the bodies of deceased officers or soldiers, unless acting under the special license of the Provost Marshall of the Army, Department, or District in which the bodies may be. Provost Marshals will restrict disinterment to seasons when they can be made without endangering the health of the troops. Also license will be granted to those who can furnish proof of skill and ability as embalmers, and a scale of prices will be governed." That Order was the precedent for today's funeral director's licenses.

Abraham Lincoln was the first president to be embalmed. When he was assassinated, Mary Lincoln remembered Holmes, who had embalmed Mr. Ellsworth as well as her son, Willie. At her request, Lincoln was embalmed. He died on April 21, 1865. His body was taken from Washington DC to be buried in Springfield, Illinois. The train made stops in twelve cities where there were public viewings. He was buried on May 3, 1865.

From the time of the Civil War until 1910, arsenic was the main ingredient used in embalming. One alternative to embalming was to encase the body in a refrigerated coffin with an ice chamber and a drainage system. Decomposition could also be delayed by storing in an air tight container. Considering these methods, one can see that embalming seemed like considerable progress.

The Civil War had driven the need to find improved ways to handle the dead. Holmes solution was the main ingredient used to preserve bodies up until 1910. However, the supposed non-toxic solution was indeed toxic and to this day continues to contaminate the soil in older cemeteries. It poses a significant danger to forensic archeologists as well as cemetery workers and could create issues with the water supply.

Information gathered from:

History - Civil War Undertaker, www.civilwarundertaker.net/history.htm

The Undertaker's Role during the American Civil War - History Net, www.historynet.com/the-undertakers-role-during-the-american-civil-war

Embalming Surgeons / Undertakers - CivilWarWiki civilwarwiki.net/wiki/Embalming_Surgeons_/_Undertakers