

The wound that killed Lincoln

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Chronology of the hours after the shooting

Time (Close approximations)	
10:13 p.m.	Lincoln shot Clot on left shoulder but very little ooze from wound at first.
10:20	Wound probed by finger of Dr. Leale to depth of two inches.
10:30	Moved to house across the street from theatre—clots evacuated repeatedly to relieve breathing.
10:50	Brandy apparently swallowed—one pupil contracted—one pupil dilated; both unresponsive to light.
10:55	Pulse 48
11:00	Brandy not swallowed—left eyelid echymosed—pulse 42 and weaker.
11:30	Right eye socket filled with blood with great protrusion of eye—pulse 45. Twitching of face on left for 20 minutes; mouth drawn slightly to left.
1:00 a.m.	Spasmodic contractions of muscles, pronation of both forearms—both pupils became widely dilated—stayed so until death—breath held during spasms—pulse to 100.
1:30	Pulse 95
2:00	Silver probe passed by Dr. Barnes—hit plug of skull at three inches (verified at autopsy) too short to follow whole length of track. Nelaton probe in 5 inches and struck the left orbital plate. (Taft)
2:32	Pulse 54
5:30	Oozing of fluid, blood and brain tissue ceased—breathing stertorous—pulse 64 and thready—respirations 27.
7:21 & 55 sec.	Breathing ceased.
7:22 & 10 sec.	Pulse inperceptible.
12:10 p.m.	Autopsy performed at the White House in Lincoln's bedroom.

One hundred and five years ago, President Lincoln was sitting in a rocking chair in a box at Ford's Theatre in Washington, watching a play on Good Friday evening.

If General Grant had accompanied President Lincoln to Ford's theatre on the night of April 14, 1865, President Lincoln would not have been shot. General Grant's large military bodyguard was specifically instructed in the matter of preventing assassins from approaching their Commander, and it is doubtful that Booth could have gotten close to either man. Unfortunately, Mrs. Grant did not like Mrs. Lincoln, and persuaded the General to renege on his acceptance of the invitation, even though it had been announced in the newspapers early in the day. Washington was still celebrating Lee's surrender, five days earlier, at Appomatox, and Grant was the conquering hero. Everyone was delighted that he might appear at the theatre with the Lincolns that evening^{1,2} and people flocked to buy tickets.

At about 10:00 p.m., just after the second intermission, a dashing young actor, who was a known Confederate sympathizer, named John Wilkes Booth, entered the front door of the theatre, bantered with the ticket-taker, who knew this popular actor well, and ascended rapidly to the dress circle. There he paused for a moment while he selected a letter or visiting card from several in his pocket, to show to anyone who might challenge him, and advanced toward the door of the Presidential box.

John Wilkes Booth approached the box according to a prearranged plan in which he was to kill Lincoln, while an accomplice, Payne, was to kill Secretary of State Seward simultaneously. Booth was able to get into the box through a series of fortuitous coincidences, barricaded the door of the box with a device he had secreted there earlier, and surveyed the box through a peephole he had made. He was able to step briskly through a door of the anteroom and point the pistol at Lincoln's head, without hesitation. Lincoln had twisted his head sharply away, at the moment the shot was fired.

Thus, the bullet entered the left side of the occiput, even though Booth was approaching Lincoln from Lincoln's right. The six inch, easily concealed, percussion Derringer was of a type which fired a large ball, almost $\frac{1}{2}$ inch in diameter, of relatively low velocity but with the force of a sledgehammer. A one inch disc of bone was driven three inches into the brain, and the ball traveled through the brain a distance of seven and one-half inches, to lodge above one eye. A fragment of the ball broke off and was lodged partway through the track.

Booth then slashed Major Rathbone, who had replaced General Grant as the invited guest of the evening, and climbed backwards over the edge of the box, catching one spur on a picture and in a Treasury Department flag which draped the front of the box. He was thrown off balance and landed heavily on his left foot, apparently breaking his fibula just above the ankle, but making his laborious escape via a horse which he had left tethered outside the back door of the theatre.

An Army surgeon, Dr. Leale, from the audience, was the first physician into the box after Major Rathbone had loosened Booth's barricading bar at the door of the Box. He found Lincoln comatose and could not discern respirations or pulse. He applied mouth to mouth respiration and straddled the chest to give closed chest "artificial respiration" (but pressing upwards to stimulate the heart). Pulse and respiration were restored and the patient even appeared to swallow one teaspoonful of diluted brandy, but thereafter would not swallow. It was thought too risky to move Lincoln to the White House, so he was then moved to a bed in a rooming house across from the theatre by a multiple hand-carry.

One pupil was widely dilated from the start, with the other pupil contracted at first, but both were unresponsive to light. About 1 a.m. both pupils became widely dilated and fixed, and stayed that way thereafter. (Conflicting statements were recorded as to which pupil was contracted at first.) The pulse was abnormally slow (40) except for a convulsive episode about 1 a.m., at which time it rose to 100 for a short period. Whenever the drainage of blood, fluid and brain tissue from the wound would slow, the respirations would become labored, but would improve when

the coagulum was removed. Respirations become progressively more labored and intermittent until they ceased (some nine hours after the shooting) at 7:21 and 55 seconds a.m., and pulse became imperceptible at 7:22 and 10 seconds a.m.

Five hours after death, an autopsy was performed at the White House, and only the cranium was opened. The bullet was found to have torn across the left lateral venous sinus, and traveled through the brain for a distance of seven and one-half inches, inflicting extensive damage along its track which was clearly visible through the hemorrhagic and "pultaceous" brain substance. There appears little room for any possibility that Lincoln might have survived, because of the contamination of the wound with multiple foreign bodies, probable hair, skin and possible fragments of greased patch or paper wadding which accompanied the bullet within the brain, the probing by unsterile fingers and probes, and the probability that a large soft tissue cavity had formed within the brain at the moment of impact.

Could Lincoln Have Survived?

Could modern neuro-surgical techniques, blood transfusions, supportive and anti-bacterial therapy have made it possible for Lincoln to have survived, had he been shot in 1964, 99 years later, instead of 1865?

Many competent authorities have expressed themselves without reservation⁷ that Lincoln could not possibly have survived. The large projectile, striking the head with the force of a sledge hammer had driven a disc of bone almost one inch in diameter ahead of it through the lateral venous sinus, across the meninges, and into the brain to a depth of three inches. A fragment of metal the size of a modern dime had torn off and was left in the track, and the balance of the projectile had travelled a distance of seven and one-half inches through the brain to lodge almost at the other side of the skull. The combination of foreign material scattered in a track through the center of the brain would have been impossible to locate and clean out, as any experienced wartime surgeon knows.

In addition, the brain had been probed to the full length of the unsterile fingers of at least two of the doctors who attended him, in an attempt to locate the ball, and

with two unsterile probes, a silver one approximately six inches long, and a porcelain tipped rubber "Nelaton" probe, to a distance of seven and one-half inches. The principles of aseptic technique, and indeed the knowledge of germs as the cause of wound infections were unknown in Lincoln's day, and while occasional Civil War soldiers were reported to have recovered from bullet wounds of the brain, these were obviously very rare exceptions.

The autopsy report that the track of the bullet could be easily distinguished because of the extensive destruction and the presence of pultaceous brain material along the track points up the tremendous damage, but does not take into account the further damage which is now known to result from the momentary creation of a large cavity in the brain,⁸ when it is struck by a missile traveling at the speed of a bullet. There seems to be no reason to disagree with those who have stated that Lincoln could not possibly have survived this wound, even in modern times, and that, indeed, it is remarkable that he survived for about nine hours. Even if he had survived, he most certainly would have been a decerebrate "vegetable," a cruel transformation from the sensitive, compassionate and thoughtful Chief of State, which he had been. Death probably spared him a vicious campaign of character assassination and defamation which would have accompanied his avowed attempts to curb post-war profiteering, exploitation and vengeance directed at the prostrate South. As it was, assassination at the very peak of his popularity, enshrined him forever in the history of the world. ◀

References

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