The crippled brain that prolonged the Civil War: General Joseph Hooker’s concussions at Chancellorsville

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President Lincoln appointed General Joseph Hooker to command the Army of the Potomac in January 1863. In April 1863, Hooker had 130,000 men compared to the Confederate Army’s 60,000. The Union forces had more food, clothing, and ammunition. On a decisive day of the Chancellorsville campaign, as Hooker stood on his headquarters porch, a cannonball struck the pillar against which he was leaning. He was hurled to the floor, stunned and senseless. Unconsciousness followed a lucid interval, requiring rest, when another cannonball struck near him. Half of the army was not thrust into battle, resulting in retreat, because Hooker was not capable of commanding. Hooker’s army missed the opportune time to attack; the order was never received because Hooker suffered a traumatic brain injury. Under current military protocol, Hooker would not be allowed to return to participation. During this crucial period a reporter stated, “the precious hour passed, while our army was without a head.” The Chancellorsville campaign resulted in Union retreat. Hooker’s disabling traumatic brain injury prevented him from giving orders and changing the battle’s outcome. Had the general not sustained a concussion, the Civil War probably would have ended earlier. 

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After an inauspicious first 2 years of the Union Army’s campaign in Virginia in the American Civil War, President Abraham Lincoln appointed 44-year-old Major General Joseph Hooker to command the Army of the Potomac on January 26, 1863. In April 1863, Hooker had 130,000 men compared to the Confederate Army’s 60,000. The Union forces had more food, clothing, and ammunition. On a decisive day of the Chancellorsville campaign, as Hooker stood on his headquarters porch, a cannonball struck the pillar against which he was leaning. He was hurled to the floor, stunned and senseless. Unconsciousness followed a lucid interval, requiring rest, when another cannonball struck near him. Half of the army was not thrust into battle, resulting in retreat, because Hooker was not capable of commanding. Hooker’s army missed the opportune time to attack; the order was never received because Hooker suffered a traumatic brain injury. Under current military protocol, Hooker would not be allowed to return to participation. During this crucial period a reporter stated, “the precious hour passed, while our army was without a head.” The Chancellorsville campaign resulted in Union retreat. Hooker’s disabling traumatic brain injury prevented him from giving orders and changing the battle’s outcome. Had the general not sustained a concussion, the Civil War probably would have ended earlier.

The Lincoln administration knew that a victory over Lee in Virginia was essential to the defeat of the Confederacy and national reunification. Leading up to the 1863 spring campaign, President Lincoln visited General Hooker and his second-in-command, Major General Darius Couch, stating, “I want to impress upon you two gentlemen, in your next fight put in all of your men” (Fig. 2).

On the third and decisive day of Chancellorsville, as General Hooker stood on the front porch of his headquarters, a cannonball struck the pillar against which he was leaning. He was hurled to the floor, stunned and senseless. A period of unconsciousness was followed by a lucid interval during which the general mounted his horse, only later to be found recumbent in a tent. Meanwhile, half of the army’s right flank was not thrust into battle, eventually resulting in retreat, because Hooker was no longer capable of providing command after his head injury. Thus, the outnumbering Army of the Potomac was unable to use its advantage toward the capture of Richmond. The hopes for the war’s imminent end faded.
General Hooker’s Promotion

General Joseph Hooker was an 1837 graduate of the United States Military Academy at West Point. During his service in the Seminole Wars and the Mexican-American War, he made a name for himself as a combat leader and received three brevet promotions (given in recognition of gallant conduct or other meritorious service). He played a prominent role in early Civil War battles, distinguishing himself as a regimental, division, and corps commander. During his career, he developed a reputation as a drinker, womanizer, gambler, and professional soldier with great ambition for promotion. He was known reverently as Fighting Joe by his men, a nickname mistakenly given to him by a punctuation error in a newspaper headline.

Despite some of his objectionable attributes, he was recognized as a capable soldier and leader, deemed a hero at the Battle of Antietam. Hooker was lauded as being “capable of taking a cold and calculated view of things.” He criticized his superiors not to gain their positions, but likely “because his professional competence was outraged by the blunders he had to witness.”

Hooker was promoted to commander of the Army of the Potomac in January 1863 after General Burnside’s disastrous defeat at Fredericksburg. In early April of 1863, Hooker staged a review for President Lincoln in Falmouth, Virginia (Fig. 3). Lincoln and Hooker discussed plans of operation but did not decide on one specific scheme. Attorney General Bates stated, “seeing what Hooker has done in the rehabilitation of that army, I do not doubt that he will use it as effectively as he has reformed & inspired it.”

Hooker’s Offensive Plans and Paranoia, and the Battle of Chancellorsville

In April, the weather proved favorable for an offensive campaign. Hooker’s intelligence relayed that two of Lee’s divisions were on the Virginia and North Carolina coast to guard against Union attacks. “The hour was, therefore auspicious for Hooker to assume the offensive, and he seized it with a boldness which argued well for his fitness to command.” Hooker was paranoid regarding counterintelligence and refrained from sharing his battle plans with his corps commanders, diminishing his ability to move his forces successfully and safely. General George Meade wrote, “Hooker seems very confident of success, but let no one into his secrets. I heard him say that not a human being knew his plans either in the Army or at Washington.” Apparently, Hooker did reveal to Lincoln his strategy, which Lincoln approved, and reminded the general that the primary objective was the destruction of Lee’s army and not the capture of Richmond.

On April 30, General Hooker arrived at Chancellorsville, a hamlet consisting of nothing more than a two-and-a-half-story, red brick building with a two-story porch supported by white pillars. He established his headquarters at the Chancellor House, a tavern built in 1816, at the junction of the Orange Turnpike and Ely’s Ford Road west of Fredericksburg (Fig. 4).

His army was spirited after gaining ground on the enemy without engagement. Major General Couch stated, “As I rode into Chancellorville that night the general hilarity pervading the camps was particularly noticeable; the soldiers, while chopping wood and lighting fires, were singing merry songs and indulging in peppery campside jokes.”

May 1 and 2, the first 2 days of the battle, did not go well for the Union Army; however, Commanding General Hooker still saw victory, with plans for the next day of an aggressive attack (Fig. 5). The Confederates pressed their advantage in the early hours of May 3, seizing Hazel Grove, an elevated terrain clear of trees 1 mile southwest of Hooker’s headquarters at the Chancellor House. They placed 30 pieces of artillery along the plateau that provided a narrow corridor to the Union positions, and commenced firing on Hooker’s headquarters (Fig. 6).

Hooker’s Concussions

In the early morning of May 3, Hooker directed reinforcements at threatened points; in the heat of the battle, he was the Fighting Joe of earlier engagements.

At approximately 9:00 A.M. Joseph Hooker walked onto the porch of the Chancellor House. The crackle of rifles and the roar of cannons filled the air. He leaned against a wooden pillar and looked out upon the dead and wounded soldiers who littered the ground.
At a critical time during a cannonade, Hooker turned to receive a message requesting support. The incoming rounds struck the front porch. Hooker later recalled, “I was standing on the steps of the portico on the Sunday morning of the 3d of May, and was giving direction to the battle, which was raging with great fury, the cannonballs reaching me from both the east and the west, when a solid shot struck the pillar near me, splitting it in two, and throwing one-half longitudinally against me, striking my whole right side, which soon turned livid. For a
few moments I was senseless, and the report spread that I had been killed." (Fig. 7). “Major Tremaine, who bore the message for support, found the general stunned and senseless. A cannon-ball had just now struck a pillar of the Chancellorsville house, against which he was leaning, and hurled him to the floor. He was supposed by his staff to be dead or dying.”

The general was not dead, but lay unconscious in the debris. Hooker may have been insensible for 30 minutes or longer. After regaining consciousness, he insisted on being assisted to mount his horse and disprove the rumors of his death. The medical director of the Army of the Potomac, Dr. Jonathan Letterman, stated, “Being within a few feet of him at the time of the accident, I saw him fall, and was instantly with him, and had him taken to his room; he was very much stunned by the blow, although no bones were broken. The rumor spread rapidly that General Hooker was killed, and to dispel the idea, he appeared to the troops, though scarcely able to sit upon his horse. The effect of this blow and fall, lasted for some hours.”

After the cannonball struck the house, Major General Couch, second-in-command, went in search of his com-


manding general, “All the time I was thinking, if he is killed, what shall I do with this disjointed army? Passing through the yard I came upon him, to my great joy, mounted, and with his staff also in their saddles. Briefly congratulating him on his escape—there was no time to blubber or use soft expressions—I went about my own business. This was last time I saw of my commanding general in front.”

Hooker was unable to give Couch a single order or directive to repulse Lee’s advancing army. In the mayhem of battle, Couch did not appreciate that his commander had been seriously injured by the blast and was not capable of further engaging the assault.

After leaving Couch, Hooker rode back toward another nearby house, which he intended would become the center of his new command. Shortly, he was overtaken with dizziness, forced to dismount and vomited. Hooker recalls, “just before reaching it, the pain from my hurt became so intense that I was likely to fall, when I was assisted to dismount, and was laid upon a blanket spread out upon the ground, and was given some brandy. This revived me, and I was assisted to remount. Scarcely was I off the blanket when a solid shot, fired by the enemy at Hazel Grove, struck in the very center of that blanket, where I had a moment before been lying, and tore up the earth in a savage way.” Quickly, Hooker and his staff took flight to the rear. This was Hooker’s second exposure to a nearby blast, and possibly a second concussion.

After the Concussions

Hooker’s headquarters were relocated about half a mile behind the front lines. He was not well. Couch was summoned to the new headquarters. One of the general’s staff members, Captain William Candler, wrote, “The blow which the General received seems to have knocked all the sense out of him. For the remainder of the day he was wandering, and was unable to get any ideas into his head … in fact, in no time of the trip after Sunday did he seem to be comos mentis (of sound mind).”

In the early afternoon, Hooker turned the command over to Major General Couch with plans to retreat. Couch wrote, “I came upon a few tents (three or four) pitched, around which, mostly dismounted, were a large number of staff-officers…. General Hooker was lying down I think in a soldier’s tent by himself. Raising himself a little as I entered, he said: ‘Couch I turn the command of the army over to you. You will withdraw it and place it in the position designated on this map,’ as he pointed a line traced on a field-sketch…. He seemed rather dull, but possessed of his mental faculties” (Fig. 8). The contemporary journalist Horace Greeley stated, “The precious hour passed, while our army was without a head. Gen. Couch was next in rank and might have assumed active command during Hooker’s insensibility but hesitated to do so.”

Major General Abner Doubleday recalled, “Hooker, having been injured and in great pain, was hardly accountable for his want of decision at this time.… Hooker did intend to use his reserve forces as soon as the enemy were utterly exhausted … when Hooker was suffering a paroxysm of pain, he was the bearer of a communication to him requesting reinforcements, which Hooker directed to be handed to General Meade.… Meade would not take the responsibility thus offered him at so late a period in

the action … without the express order of General Hooker, or the sanction of General Couch, who was his superior officer, and who was absent…. A single division thrown in at this time would have retrieved the fortunes of the day.” Couch and Meade recognized the battle was not faring well and did not want to shoulder responsibility for a failed campaign. Couch only began to lead when commanded by Hooker to retreat; had he or other officers acted earlier, the Union would have avoided defeat.

Major General Pleasonton reflected, “the army was virtually without a head…. In fact, the greatest injury was inflicted upon the 3d of May, while the army had no commander. Had the First Corps, which had not been engaged, and the Fifth Corps, still fresh, been thrown into the action in the afternoon of Sunday, the 3d of May, when Lee’s troops were exhausted from the struggle, they would certainly have made Chancellorsville what it should have been,—a complete success…. There was no one to order them into the fight…” Doubleday stated, “37,000 men were kept out of the fight, most of whom had not fired a shot, and all of whom were eager to go in … which had it been used against Stuart’s tired men would necessarily have driven them off the field.”

The timing of General Hooker’s concussions created a void of command at a critical time when action was necessary. No other commanding officer was willing to seize
the power at the time of his injury. Hooker’s paranoia and limited communication of battle plans incapacitated other officers’ ability to continue the attack. By the time Couch returned to Hooker, Hooker focused only on saving the army rather than pursuing victory, issuing the order to retreat. “The army recrossed the Rappahannock River on the night of May 5th, and took up again the position at Falmouth which they had occupied before the campaign.”

The Battle of Chancellorsville was lost.

Hooker’s Concussions in a Contemporary Lens

An understanding of closed head injuries was widespread among physicians before the American Civil War. Such knowledge had been accumulated from previous wars. Several leading medical and surgical authorities published manuals or pocket reference books designed to be easily carried by the field surgeon. These manuals included the experiences and guidelines regarding the treatment of head injuries written by 18th- and early 19th-century surgeons. All head injuries were considered to be very serious, including concussions.

In William Pirrie’s *The Principles and Practice of Surgery*, edited by John Neill, surgeon to the Pennsylvania Hospital, concussion was well defined. In that book, material from John Abernethy’s 1810 *Surgical Observations on Injuries of the Head; and on Miscellaneous Subjects* was adopted: “The 1st stage which immediately followed the injury, is one of collapse, in which there is insensibility, with derangement of bodily powers; the 2nd is one of reaction, in which there is, to a greater or lesser extent, some return of sensibility, and restoration of bodily powers; and the 3rd is one of inflammation of the brain, indicated at first by increased excitement of that organ, and increased vascular reactions.”

The treatment of concussions was a matter of great diversity of opinion and at the discretion of the physician. A contemporary physician described concussions as a “shock to the brain, by which its substance is more or less shaken, with interference of its circulation, often injury to its structure, and with suspension of its functions for a certain period.” The physician reported “the patient staggers … recovers himself, and without further annoyance continues his employment.” The treatment for severe concussions during the American Civil War included rest, avoidance of bloodletting, and avoiding brandy. The medical text implies that if a patient recovers the ability to function, rest is not required; however, Dunglison’s 1848 work *A Dictionary of Medical Science* argues, “After severe concussion, a patient, although apparently well, is not safe until sometime after the accident.”

Based on personal observation of many of those who witnessed the attack on the Chancellorsville headquarters, General Hooker sustained a blast-related mild traumatic brain injury with a loss of consciousness, vomiting, impairment of functioning, and persistent symptoms. Lettermann, an experienced war surgeon, was nearby and witnessed the head injury that laid his commanding general unconscious on the ground. He had worked closely with Hooker to improve the soldiers’ health and diet; he knew Hooker. Letterman must have noted a significant change in Hooker’s stunned state and his inability to command but did not act to remove him as commander. If Hooker had received a gross injury, such as a penetrating head injury, loss of limb, or an abdominal injury, the transfer of command would have been strongly supported by other commanding officers and Letterman.
On the other hand, military medicine at the time was not attractive. The legal position of the doctor during the Civil War was poorly defined. The regiment’s surgeon had little control over his own medical facilities and wielded little military influence. The physician’s legal status in combat was not covered by legislation; demands were great and authority was little. The military surgeon held no military rank in either the Confederate or the Union Army and the propriety of their recommendations was often questioned.22

Letterman undoubtedly recognized the severity of Hooker’s head injury and knew what to do, but he also knew his place and gave no medical recommendations. Letterman’s lack of authority or poor decision-making is evidenced by Hooker drinking brandy after his head injury, which was contrary to published concussion treatment at the time. Meanwhile, others around the stunned Hooker with the power to intervene were blinded by the intensity of the fighting or looked the other way. Couch, second-in-command, must have known something was wrong. Hooker was without self-awareness and could not execute the needed duties.

Hooker’s Concussions in a Modern Lens

In modern military protocol, the Defense and Veterans Brain Injury Center recommends that service members should be relieved of duty, evaluated by medical personnel, and return to duty after rest and resolution of symptoms. The soldier’s return to activity follows a 6-step protocol progression: from rest, to light routine activity, to light occupation-oriented activity, to moderate, intensive, and unrestricted activity. Each step requires 24 hours, and the soldier must have symptom resolution before progressing to the next activity.

Symptom identification and monitoring after mild traumatic brain injury allow identification of individuals ready to resume normal activities, including executive decision-making. Removing the service member from combat or physically demanding duties is vital because failure to do so could negatively impact the member’s and unit’s safety, as well as the effectiveness of the member’s leadership, and might compromise the success of the mission.

Symptoms are monitored daily using the Neurobehavioral Symptom Inventory, tracking 22 common concussion symptoms.23,24 Other criteria have been developed that do not rely on self-reporting of symptoms. These methods demonstrate that patients with postconcussive symptoms do not perform as well as healthy controls in multitasking performance testing and may lack the executive function required for high-risk military operations.25

Based on eyewitness accounts, Hooker experienced 15 of the 22 symptoms listed on the Neurobehavioral Symptom Inventory, demonstrating that he was not fit to command. In modern military protocol, he would not have been allowed to return to duty immediately following his period of unconsciousness.

Conclusions

General Hooker’s concussions occurred at the climax of Chancellorsville, leaving the army without a head dur-
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