**THE DEATH OF JESUS CHRIST: FORENSICS AND FULFILLMENT**

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**Over the two millennia since Jesus’ Ascension, His Passion and Crucifixion has been examined and analyzed with the question of “Why?”. In contrast, the “How?” of his torture and death is a much more recent discussion. With progress in science and medicine, an increasing amount of commentary has wrestled with this question over the past few centuries. These “historical coroners” have debated the physiologic and medical factors that led to Jesus’ death.**

**Four landmark publications have led this inquiry. The first was in 1594, by Justus Lipsius, in his book, *De Cruce*. Lipsius was a Catholic Flemish philosopher and humanist. Although not a physician, his work was the first to dispute the usual depiction of crucifixion seen in artistic renditions. William A. Stroud, a British physician, produced *A Treatise on the Physical Cause of the Death of Christ* in 1847. The era of modern medicine brought Dr. Pierre Barbet’s work, *A Doctor at Calvary*, in 1950. Earlier this year, Dr. Thomas McGovern released his work, *What Christ Suffered*, culminating his thirty years of research and sheds new light on many areas of study.**

**Who was Jesus? All evidence points to a healthy Jewish man in his early to mid-thirties. What would lead to the death of a healthy man over eighteen hours without a single fatal injury? The Gospels of Matthew and Luke describe many factors that contributed to Jesus’s decline. From the Garden of Gethsemane to His death sentence before Pilate, he endured severe emotional stress, spiritual torment, abandonment, sleeplessness, and repeated beatings. He was forced to walk a total of nearly three miles prior to carrying His cross, with no evidence of receiving food or water since Thursday evening in the Upper Room. The night of his arrest and imprisonment was likely cold, with nighttime low temperatures averaging fifty degrees in Palestine in early April. The possibility of hypothermia cannot be discounted.**

**Luke, a physician, describes Jesus as “sweating blood” during his intense prayer in the Garden. This is not hyperbole or metaphor, but is indeed a recognized condition known as hematohidrosis, well-documented in the medical literature (1). Thereafter, He was assaulted repeatedly in His appearances before Annas and Caiaphas, as well as during His two interrogations before the Sanhedrin. The most gruesome and damaging injuries prior to his crucifixion, however, were clearly inflicted with the scourging by the Roman *quaterno*.**

**The most likely instrument used was the flagrum, comprised of several leather cords nearly two feet long, with various metal and other sharp objects attached to their tips. In the original Greek descriptions of Roman scourging, the term *derontes* is used, meaning “to beat and flay”. The intent was to both soften and then lacerate the victim’s flesh. If the Shroud of Turin is indeed Christ’s burial cloth, analysis of the body reveals nearly four hundred separate impacts (2). The blood loss produced, both external and internal, would have been profound. Shortly thereafter, the sadistic crown of sharp thorns impaled into a scalp with rich blood supply would have produced additional and significant bleeding.**

**Although the distance that Jesus carried His cross was only about one third of a mile, He did so in a very weakened condition. Even if He carried only the *patibulum*, the crossbeam, rather than the entire cross, the effort would have been extreme. The *patibulum* would likely have weighed fifty to seventy-five pounds. His arms would have been lashed to it, preventing Him from protecting Himself when He stumbled and fell. The rough wood on His shoulders and upper back would repeatedly reopen the bleeding wounds from the scourging.**

**Upon His arrival to Calvary, the torture continued as He was fixed to the cross. It seems most likely that the nails, which were approximately six inches long and one-half inch thick, were hammered through His wrists rather than the commonly depicted palms. There is growing support that His feet may have been secured to the sides of the *stipes*, the upright post, with a nail from outside to inside through each heel bone (3). Certainly, these penetrating injuries would cause more bleeding, and the intensity of the pain is unimaginable.**

**In the past, many commentators in this area of study attributed Jesus’ death to “suffocation”. To be sure, His breathing was impaired, both by the lack of normal chest expansion in a crucified position and the probable trauma to his lungs from many beatings. However, suffocation denotes the inability to breath. Jesus’ last moments included His seven last pronouncements from the cross, so He clearly was breathing well enough to speak. Ultimately, death occurs when there is insufficient oxygen supplied to the body by the blood. Thus, with the combination of impaired lung function and excessive blood loss, organs, especially the brain and heart, will steadily decrease in function and ultimately stop.**

**Over the past two centuries, many causes of the death of Jesus have been proposed. These have included pulmonary embolus, cardiac arrhythmia, and many others. However, with Jesus’ good health and slow death, a single and rapid cause would seem unlikely. Rather, the combination of excessive blood loss (hypovolemic shock) and impaired respiration would have led to a condition that was not life-sustaining.**

**In a truly literal sense, it is likely that Jesus Christ indeed bled to death. The theology of His manner of death would not have been lost on the Jews of that time. Blood was sacred to the ancient Jews, with notations in the Pentateuch that “the blood is the life” (4). When an animal was sacrificed in the Temple, it was not an acceptable sacrifice unless all the blood was drained from the body. Those who witnessed Christ’s death would not have overlooked the significance of how He died. As a scholar of the Jewish faith, St. Paul understood this importance. As he wrote to the new Christians in Philippi, “Christ emptied Himself”, and to those in Ephesus, “we have redemption by His blood.” Christ’s life and death fulfilled both the prophecies of the time and the promises of the Christian future.**

1. **Uber M et al. Hematohidrosis: insights in the pathophysiology. International Journal of Dermatology. 54(12):e542-3, Dec 2015. doi:10.1111/ijd.12932**
2. **Bedon G et al. Study of the Bloodstains in the Shroud of Turin: Chromatic Analysis and Possible Interpretation. MATEC Web of Conferences. 36(6208), Jan 2015. doi:10.1051/matecconf/20153602003**
3. **McGovern TW. *What Christ Suffered: A Doctor’s Journey Through The Passion.* Our Sunday Visitor Publishing, 2021, pp. 167-170.**
4. **Deuteronomy 12:23; Leviticus 17:11**