

The Physical Suffering and Death of our Messiah

It is difficult for most of us to hear about someone being beaten, tortured, and falsely accused. And when these things are done to the innocent, it is particularly disturbing. "The Passion of Christ" has opened up much debate and dialogue about the suffering of Jesus. The fact that it happened to someone who was without sin makes the suffering death of Jesus Christ overwhelming, yet it was necessary for the salvation of mankind. The following interview with Dr. Gene Rudd, the associate executive director of the Christian Medical & Dental Associations details the medical literature extensively, has been featured in the media on this subject and offers the following insight.]

Q. Dr. Rudd, what is your impression of the physical status of Jesus in the days prior to His crucifixion?

A. First let me mention that while the information for this discussion was gleaned from several resources, the most important references were the Gospels, the eyewitness accounts, and an article by Dr. William Edwards and his colleagues published in the *Journal of the American Medical Association* in March 1986 (JAMA Vol. 255 No. 11 pages 145-1463). These were the most useful resources.

We have reason to believe that Jesus was a healthy, robust young man. It is clear that He journeyed throughout the country on foot, except on at least one occasion where He rode into the city on a donkey. Just plotting the places that He visited, we can calculate that Jesus walked hundreds of miles during His three years of public ministry.

But even with good health, the days leading up to the crucifixion might well have been exhausting for anyone. The routine that week was for Jesus and the disciples to sleep at the home of Mary, Martha and Lazarus in Bethany, about two miles from Jerusalem. They would journey into the city during the day, then return to Bethany in the evenings via the Garden of Gethsemane. This routine

was well known to Judas, making it easy for him to lead the soldiers to arrest Jesus in the Garden away from the crowds.

During the day in the city, Jesus would teach the crowds and debate with the religious leaders. This would be an exhausting schedule for most of us. And it seems that Jesus, in becoming a man, accepted the general limitations of a human body – requiring, food, rest and sleep. We should also keep in mind that Jesus was anticipating the tragic events of the coming days. At least six times He warned His disciples that He was going to be killed. This must have weighed heavily upon Him, even long before the Garden prayer.

So, at the time of the Last Supper, we see a healthy young man who has had a busy few days and some increasing mental anguish. Not to get ahead, but I will also point that Jesus was awake all night before His crucifixion. In addition, while the location of all the various events are not certain, some have estimated that Jesus was forced to walk 2.5 miles during His visits to different local authorities during that night. This distance in itself would not have been a problem for someone healthy who was used to walking. However, it probably added to His later exhaustion.

Q. What are the medical implications to what happened in the Garden on that last night?

A. The Scriptures tell of Jesus and His disciples completing the Passover meal, then going to the Garden for prayer. Jesus' prayer went late into the night. He asked Peter, James and John to come away with Him and be vigilant in prayer. It is probable that Jesus prayed for two to three hours. Twice Jesus found the three disciples asleep. I don't know about you, but I have never prayed for that length of time. I mention this because prayer itself, when done in earnest, can be an exhausting experience, further adding to Jesus' fatigue.

The agony of Jesus in the Garden seems strange to us. Luke, the physician-writer of the Gospels, gives us insight into a medical phenomenon that is extremely rare--the sweating of blood. The medical term is "hematidrosis." This has been reported in modern medical literature as occurring in people with blood clotting disorders and in people without these problems who are in a highly emotional

state. There is actual bleeding into sweat glands. The perspiration is mixed with blood, then it appears on the skin. It is reported that the skin becomes fragile and tender in these situations. This phenomenon reflects that it was no small effort on the part of Jesus to get to the point of saying, "Not my will, but Thine, be done." Hematidrosis has been given as the explanation for historical accounts of people who manifest stigmata – the appearance of signs on the skin. There was probably little actual blood loss, but in the cool night air, Jesus may have been chilled by the evaporating sweat.

Q. What happened next?

A. Probably sometime after midnight, Judas' betrayal of Christ was complete when he led the soldiers to Jesus in the Garden. There was a brief skirmish with Peter cutting off the ear of Malchus, which Jesus then healed. Jesus was first taken to Annas and then to Caiaphas, two of the Jewish religious leaders. Many have determined that these midnight inquisitions were illegal under Jewish law. However, the leaders likely anticipated a public revolt if they began the process during the day when many of those loyal to Jesus would protest.

History records that Annas, who was the father-in-law of Caiaphas, had been the previous high priest. Though Caiaphas was the current high priest, Annas still had significant influence with the Jews. He may have been the leader of the plot against Jesus. That explains why Jesus was first taken to him prior to being taken to Caiaphas and the Sanhedrin.

Q. Were their physical assaults on Jesus prior to His flogging?

A. Yes, Scripture records that Jesus was struck in the face while before Annas. And when Jesus was before Caiaphas and the Sanhedrin, He was beaten by the soldiers of the Sanhedrin. We do not know the severity of these physical assaults, but we know he was blindfolded, spat upon, mocked and beaten. Jesus may have been cut and bruised, but His injuries were not likely serious at that point.

Accusing Jesus of blasphemy, a Jewish crime worthy of death, but not having the civil authority to execute anyone, the Jewish leadership referred Jesus to the regional Roman ruler, Pilate, with demands for His crucifixion. Pilate sends Him

to Herod who sends him back. While not finding Jesus guilty of a capital offense, Pilate sought to appease the religious leaders and the mobs by agreeing to have Jesus flogged and crucified.

Q. Tell us about flogging.

A. Flogging is also called scourging. It is still practiced to varying degrees in certain countries today. History records that it was routine to flog a criminal prior to a Roman execution. Only women, senators and Roman soldiers who were not guilty of desertion were allowed to escape flogging.

The flogging of Jesus probably took place in the early morning hours. There are several historical accounts of the details of flogging. The victim would typically be stripped naked and tied upright to a post. One or two lictors would inflict the punishment using a flagrum – a whip that had several braided thongs in which bone or metal fragments would be tied along their length. The severity of the flogging was variable, perhaps determined by the nature of the crime or the disposition of the lictors. Contrary to Jewish law that limited flogging to 39 strips, Roman flogging was not limited. It was intended to add to the torture and to shorten the time of subsequent crucifixion.

As I mentioned, there are detailed historical accounts of flogging that describe the whip and the fragments of bone and metal tearing deeply into the flesh. Often the back and leg muscles would be exposed and torn. This would be associated with significant pain and bleeding. Many victims did not survive this scourging process. There was an inverse relationship between the severity of the flogging and the time spent on the cross prior to death. The more severe the flogging, the sooner death would come in crucifixion.

The flogging of Jesus is mentioned in 1 Peter. The Greek words used there imply that Jesus' flogging was particularly severe. This is supported by our knowledge that Jesus died prior to the death of the two criminals who were crucified with him.

After Jesus' flogging and prior to His crucifixion, He was subjected to additional abuse. As the Roman soldiers mocked Him as a king, they placed a robe on Him,

gave Him a wooden staff as a scepter. They also placed a crown of thorns on His head. In addition to the trauma already inflicted, the Scriptures say that the soldiers struck Him repeatedly with a staff.

At this point, Jesus' medical condition must have been serious to critical. He had been through the emotional and physical stress in the Garden prayer. He has experienced hematidrosis, the sweating of blood. He was stuck in the face before Annas, beaten before Caiaphas, scourged by the Romans, and now beaten again with a staff. The blood loss and trauma would have qualified Him for critical care management as a life threatening condition. And crucifixion had not yet begun.

Q. Why was crucifixion chosen as the means of killing Jesus?

A. Crucifixion was intended to take the life of a criminal in a most cruel and degrading way. Public crucifixion was thought to be a major deterrent to others who may consider violating the law or antagonizing the civil authority. The word crucifixion is based on the Latin word from which we get our English word "excruciating." The original word means "out of the cross." Many of you who hear or read these words will have seen the movie "The Passion of Christ." Many were shocked by the level of violence in the movie and wondered if it could be true. The answer is "yes." Flogging and crucifixion were intended to be shocking in hopes of controlling the behavior of the people. The movie gives an accurate portrayal of the cruelty involved.

While crucifixion was not begun by the Romans, they certainly advanced it and perfected its torture. As was true of flogging, most Roman citizens were exempt from this form of execution. An exception was made for deserters. Crucifixion was practiced by the Persians and Alexander the Great. It is even referred to in Deuteronomy 21 where the Old Testament law required that the body of someone hung on a tree was to be buried before nightfall.

Following the flogging, the march to the place of Jesus' crucifixion probably began in the mid- to late-morning. As was common, Jesus was required to carry His cross. But in His pre-shock state, Jesus was not able to carry it all the way so Simon, a man from Cyrene, was forced to assist.

Crucifixion itself inflicted several physical traumas. First, the body was nailed to the cross. The arms would be spread wide as the hands were nailed to the horizontal beam. Traditionally, we think of the nail piercing the palms of the hands. While that may be so, the Greek term used in Scripture can also refer to the wrist. This is important because we know from archeological studies that crucifixion victims were nailed through the wrists. Modern-day studies on cadavers have shown that nails placed through the palms of the hands would likely tear out rather than support the weight of the body. When Jesus refers to the nail prints in His hands, the anatomical word can just as easily be understood to mean the wrists.

The bones and ligaments in the wrists provide adequate strength to support the body during crucifixion. An experienced Roman soldier would know this. However, placing the nail through the wrist meant damage to the tightly compacted bones, ligaments--and most likely the median nerve. That nerve controls much of the function and sensation from the hand. A nail placed through the wrist would likely leave the hand paralyzed and in a claw-like position. Archeological digs have produced crucifixion nails that were typically 5-7 inches long and about $\frac{3}{4}$ inch square. Such a size nail is certain to cause significant tissue trauma and pain.

The feet were commonly nailed to the vertical post of the cross, often to the front of the beam. This would require that the knees were flexed (bent) so that the soles of the feet were against the beam. Again, the pain of piercing the feet would be significant, even to someone who had already been tortured.

Q. From a physician's standpoint, describe the process of crucifixion and the trauma on the body.

A. While dying on the cross could last for days, it usually took a few hours, depending on the severity of the flogging and whether the process was hastened by the breaking of the legs. Jesus' crucifixion began about noon and was over by 3:00 in the afternoon.

To better understand the agony and dynamics of crucifixion, you have to understand how the weight of the body was suspended and how that affected

breathing. Crucifixion victims would begin with their weight hanging from fully extended arms. In this hanging position, the chest was fully expanded, making it impossible to fully exhale (breathe out). Soon, carbon dioxide would build up in the bloodstream, causing muscle cramps throughout the body. In addition, there would be an overwhelming urge to breathe. In order to fully exhale and take a deep breath, the victim would have to move his body up the cross by primarily pushing up with his legs, assisted by pulling with the arms. In this elevated position, breathing would be easier, but fatigue would soon set in so that the arms and legs could no longer hold up the body. The body would fall back to a hanging position.

There are tortuous consequences for the body that moves up and down on the cross in order to breathe. As the body elevates, the arms must flex and rotate. This means the wrists would rotate on the square nails piercing them. The pain would be intense. Perhaps more painful would be the trauma to the back. Already laid open by flogging, the back would have to rub against the wooden beam, up and down, adding more trauma, pain and bleeding. Understanding this will give you a new perspective the next time you sing about "an old rugged cross." But as long as it was possible to do so, the need to breathe would force the victim to endure this pain in order to continue his life.

The Gospel accounts record that Jesus spoke seven times from the cross. In addition to the movement on the cross to breathe, Jesus probably had to endure this pain to speak.

Q. What was likely the cause of death for Christ?

A. It is clear from the Gospel accounts that Jesus died prior to having His side pierced by a spear. But the two being crucified beside Him were still alive at the time the soldiers wanted to end the crucifixion. The soldiers could have easily used their spears to end these lives, but instead, they broke their legs. Why? Because the intended manner of death on the cross was asphyxia. Asphyxia is the medical term that means inadequate respiration. With their legs broken, they could no longer push themselves up the cross in order to take an adequate breath. The result would be a quick death due to oxygen deprivation--asphyxia.

But Jesus was already dead. He may have died when He became so fatigued He could no longer push Himself up the cross to breathe. He could have also died of a sudden cardiac event such as an arrhythmia or arrest. These events are much more likely when there has been significant trauma and blood loss such as Jesus had experienced. We use the term "hypovolemia" to describe the condition where there is inadequate blood volume to sustain circulation. Whether Jesus' heart or lungs stopped first we do not know.

However, there is a most interesting observation in the Gospel of John. We know that John was at the foot of the cross with Mary. He records the piercing of Jesus with a spear. Since it was likely that Jesus was already dead, the soldiers did not attempt to break His legs. Instead, one of them thrust a spear into His "side." Roman soldiers would certainly have been schooled in how to deliver a lethal thrust with a spear. They would aim for the heart. With the body of Jesus elevated on the cross, the thrust would have come from below, most likely penetrating the lower chest wall, the lungs, and then into the heart. John records seeing water and blood flow out. This may seem odd until you understand the body's reaction to trauma. It is common in massive trauma for the lungs to leak clear fluids into the surrounding space. It is called a plural effusion. This would be the water that flowed out. It is also likely that Jesus suffered what is called a "consumptive coagulopathy." In massive trauma the clotting factors can be used up, leaving the blood unable to clot. The blood in and around Jesus' heart could no longer clot. This explains the nature of John's description that suggests that the water then the blood flowed freely.

By all accounts, Jesus was surely dead. This discounts the theory that He simply swooned and revived in the tomb. Roman soldiers were too good in their jobs for us to believe that could happen.

Q. Is there more to the story?

A. Yes, there are many details we have not covered. But the most important part of this story is that in the end, there was an empty tomb! As the cross provided for forgiveness of sins through the willing sacrifice of Jesus, it is the resurrection that brings us hope for a never-ending story.

Q. You have shared your professional insights into the physical suffering and death of Jesus. What are your personal insights?

A. I find the life and claims of Jesus to be compelling. In Him I see God who cares so much for His prize creation that He was willing to make a great sacrifice to restore the relationship that we broke through disobedience. Jesus was the sacrificial lamb Who was nailed to the cross in my place. When He struggled to elevate Himself so that He could breathe, He not only had the weight of His body to lift, He also bore the weight of my sins and all the sins of all mankind from the beginning of time to the end of time. It was an immense burden. But in those hours on the cross, there was a time when He willingly accepted that His Father would turn His back on His suffering so that the price for our sins could be paid--once and for all. It is certain that the blood shed by Jesus was more than enough that there was at least one red blood cell for every person who will ever live. To me, that makes this story very personal. When we understand the suffering that Jesus endured through flogging and crucifixion, how can we fail to respond when all He asks us to do is believe in Him with our hearts and confess Him with our mouths? Yes, it is personal; Jesus suffered and died for me. I confess Him as Lord and Savior.

Indeed, may we all do that today.