

THE MEDICINE OF THE CRUCIFIXION

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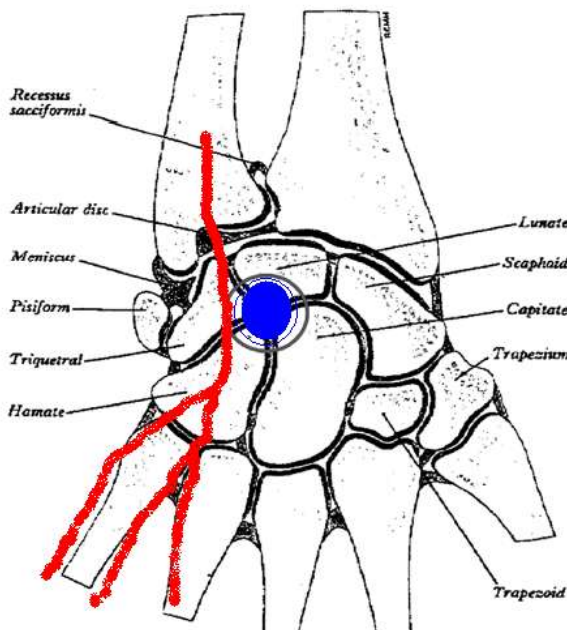
SUMMARY

- Historical Roman documents refer to the crucifixion of Jesus.
 - There is good evidence that Our Lord was nailed to the cross through his wrist bones, causing ulnar bilateral nerve palsies.
 - During crucifixion, congealed bloods shows that He alternated between standing with his legs and hanging from his arms.
 - Deep and prolific wounds occurred because of the torture prior to crucifixion.
- He did not have sedatives or analgesia to ease his death
 - He died and “blood and water” attest that He was definitely dead, and completely dead.
 - St John set it out without any room for doubt telling us that “immediately there came out blood and water. This is the evidence of one who saw it -- true evidence, and he knows that what he says is true -- and he gives it so that you may believe as well.”
 - Medical evidence is that Our Lord was truly and completely dead.

NAILING TO THE CROSS

Crucifixion is not a pleasant death, and with nails put in your arms it is an especially painful one. Death occurs from exhaustion with the victim standing for a while upon his legs and then collapsing from weakness to hang from the arms. But hanging from the arms, while every painful is also

suffocating. Breathing becomes harder, and gradually with that there is development of pulmonary oedema and pericardial effusions. Finally you suffocate and die in heart failure.



It was shown by some remarkable experiments in 1953 (which we hope were ethical but were at least done on corpses) that for effective suspension by a nail the hand cannot be pierced between the metacarpal bones. Doing that merely means that the nail will tear the flesh and crucifixion fail. Driving a nail through the carpal bones works well, and leads to ulnar nerve palsy. The Turin Shroud shows a man with just such a palsy and with nails in the

Figure 1 Place of nail and distribution of the ulnar nerve. Adapted from [1]

carpal bones (and not where all mediaeval paintings put the nails).

BLOOD AND WATER

To confirm that a victim was dead, the Romans inflicted a spear wound through the right side of the heart. The medical significance of the blood and water has been a matter of debate. One theory (Bergsma) states that Jesus died of a massive myocardial infarction, in which the heart ruptured [2] which may have resulted from His falling while carrying the cross [3]. Davis suggested that Jesus' heart was surrounded by fluid in the pericardium, which caused pericardial tamponade [4]. Another theory that I have often heard is that in a sick man (Our Lord was badly beaten) after death the blood will separate into clot and serum. We do know that death of the cross occurs from exhaustion and inability to support the weight of the body and to breathe. Once the legs have collapsed, the arms hold the body up and breathing becomes far harder. Some have suggested that that exhaustion along with the immobilization of the arms breathe will lead to the build up of pulmonary oedema and pleural effusion, with perhaps pericardial effusion too. So a spear to the heart will bring forth blood and water which is diagnostic of death. But in fact none of this is certain. I have asked three (21st Century) cardiologists what they know about death from crucifixion and none have been able to help me. While cadaveric experiments were possible in the 20th Century, there is no recent experience of crucifixion itself.

The stated order of "blood and water" may not necessarily indicate the order of appearance, but rather the relative prominence of each fluid. In this case, a spear through the right side of the heart would allow the pleural fluid (fluid built up in the lungs) to escape first, followed by a flow of blood from the wall of the right ventricle. [5] The important fact is that the medical evidence supports that Jesus did die a physical death. Even more importantly, St John was absolutely clear that blood and water meant death.

EVIDENCE OF OUR LORD'S CRUCIFIXION AND DEATH

Tacitus refers to the crucifixion of Christ [6] . Examination of the Holy Shroud of Turin (of whose authenticity as the burial cloth of Our Lord this author is persuaded) shows the prolific marks from the scourging as well as the marks of deeply impaled thorns upon His head. The blood flowing from the nail wounds at the wrist show two directions of congealed blood at different angles. One angle for standing up and the other for hanging exhausted by the arms. We cannot imagine the agonies of moving between those two positions.

Evidence from the shroud, corroborates the severe injuries suggested by Isaiah "*... Just as there were many who were appalled at him -- his appearance was so disfigured beyond that of any man and his form marred beyond human likeness--*"[7] whose means of infliction is set out in all four Gospels.

As He died, Our Lord refused the mixture of wine and myrrh that was given by Jews to ease the death.## check this. *"It was a merciful Jewish practice to give to those led to execution a draught of strong wine mixed with myrrh so as to deaden consciousness" (Mass Sem 2.9; Bemid. R. 10). This charitable office was performed at the cost of, if not by, an association of women in Jerusalem (Sanh. 43a). The draught was offered to Jesus when He reached Golgotha. But having tasted it....He would not drink it.He would meet Death, even in his sternest and fiercest mood, and conquer by submitting to the full.."* [8]

We said above that death from crucifixion occurs due to suffocation with the development of pulmonary oedema and pericardial fluid. The Roman's knew this. Breaking the legs meant that death would soon occur as the victim could no longer hold himself up with those legs. This was done for the others, crucified with Our Lord.

Then the Jews, (because it was the parasceve,) that the bodies might not remain on the cross on the sabbath day, (for that was a great sabbath day,) besought Pilate that their legs might be broken, and that they might be taken away. The soldiers therefore came; and they broke the legs of the first, and of the other that was crucified with him. [9]

THE DEATH OF CHRIST

Our Blessed Lord was too exhausted from blood loss , his beatings, and his weakness from the Garden of Gethsemane. He arrived at Calvary very weak, so much so that St Simon of Cyrene had had to intervene to keep Him going long enough to get to the top of Calvary. He died before the soldiers could break his legs. So, to be sure, they applied the best test of death in crucifixion. They pierced his heart.

St John tells us that *"But after they were come to Jesus, when they saw that he was already dead, they did not break his legs. But one of the soldiers with a spear opened his side, and immediately there came out blood and water. And he that saw it, hath given testimony, and his testimony is true. And he knoweth that he saith true; that you also may believe."* [10]

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St John tells us that Christ was dead. Blood and water came out as happens when you die from Crucifixion. He then tells us that he tells the truth. And finally, just to be clear he repeats that he knows the truth. The medicine of the crucifixion demonstrates that Our Lord died, and was properly dead. Claims that he was only a little bit dead are refuted. We need not doubt.

This is important , when we come to think through the physics of the resurrection and its relevance and resonance with some remarkable miracles.

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[9] John 19,31-32 Douay Reims bible

[10] John 19,33-35 Douay Reims bible