

THE STRANGE WORLD OF CRUCIFIXION SCIENCE

Can the medical facts concerning Jesus's final moments ever be established?
MAX HARTSHORN considers the strange world of crucifixion research, in which bodies both living and dead have been nailed to the cross in the name of science...

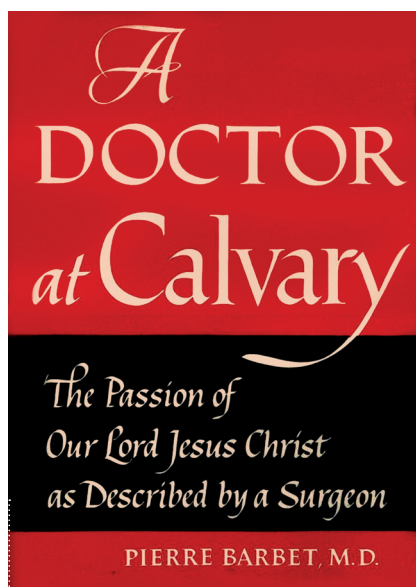
Most amputated limbs wind up in the hospital incinerator, but Dr Pierre Barbet had other ideas. Having recently lopped off the arm of a "vigorous man," the Parisian surgeon squared a large nail in the center of its palm and mounted it as one might the prized head of a slain beast.¹

Barbet then tied a 100lb (45kg) weight to the elbow, causing the palm's flesh to buckle and tear under its pull. After about 10 minutes, the initial wound had stretched into a gaping hole, and Barbet felt it was time to give the whole thing a good shake. What was left of the cadaverous palm burst open and fell to the floor, raising the question: was Jesus Christ really crucified with nails driven through the palms of his hand?

THE MAN OF THE SHROUD

To the uninitiated, the research of Pierre Barbet (1884-1961) might seem morbid, but he is far from the only scientist to become captivated by Jesus Christ's death. Jesus's final moments have always been shrouded in mystery, but in the past two centuries his Passion has increasingly become the subject of dispassionate investigation. By exposing the dead and the living to all the torments of Christ, researchers believe they can reveal the medical facts behind the scriptures. Sides have been speared. Scalps have been pierced with thorns. Countless bodies, both living and dead, have been crucified in the pursuit of knowledge.

Crucifixion science tries to unravel the mystery of Christ's death. The scriptures say Jesus died on the cross, but that's only half the story. Crucifixion victims regularly hold out for days.² Yet the Gospels agree that Jesus died in a matter of hours.³ Why did this healthy, fit, and relatively young man die so soon?



RESEARCHERS BELIEVE THEY CAN REVEAL THE MEDICAL FACTS BEHIND THE SCRIPTURES

In the late 1940s, with the scientific atrocities of the war still fresh in people's minds, German radiologist Hermann Mödler somehow managed to get away with crucifying medical students. Stretching their arms out to mimic the pose of Christ, the Cologne-based doctor hung students by their wrists and monitored their vital signs.

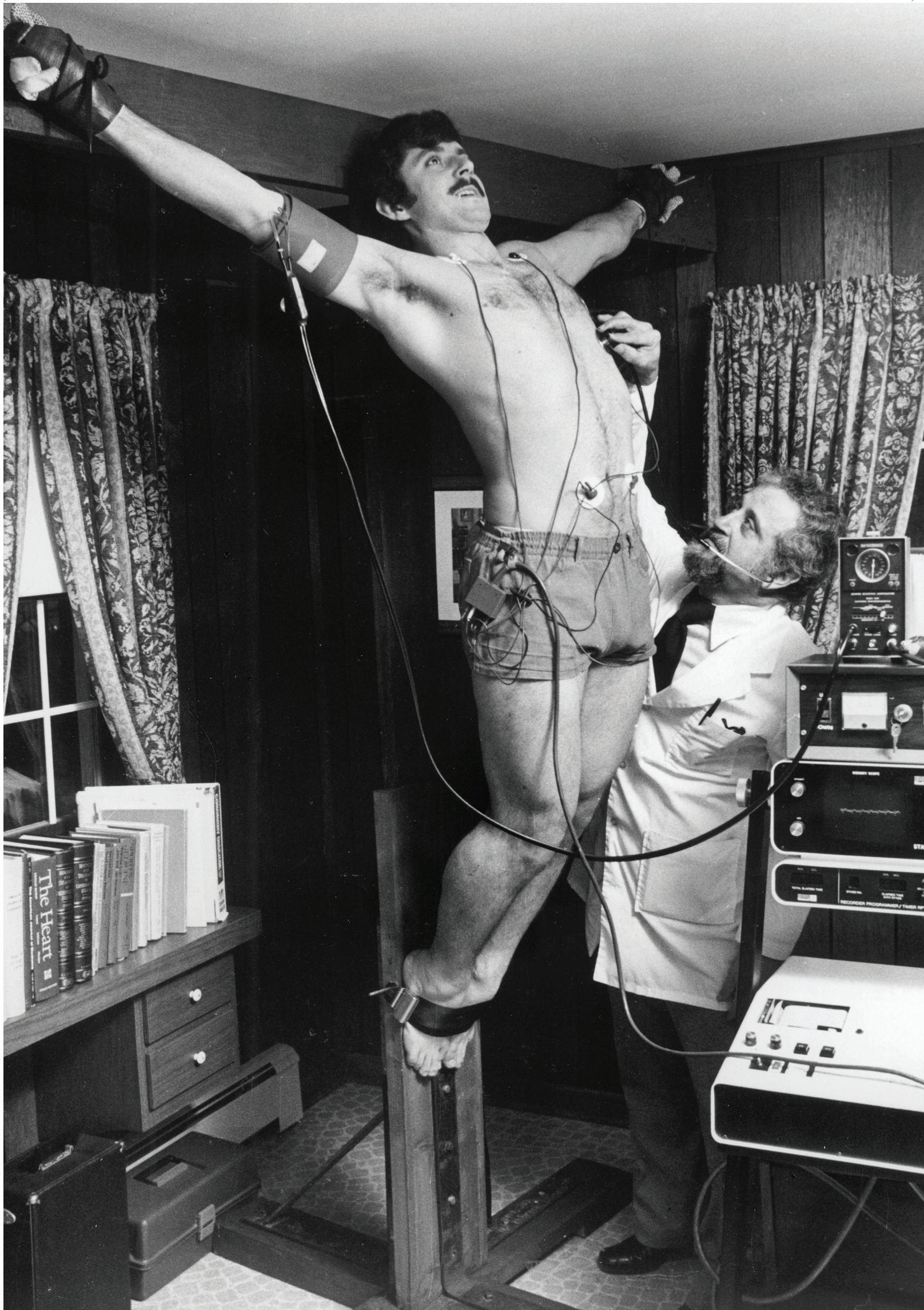
FACING PAGE: Dr Frederick Zugibe examining one of his crucified volunteers.

After six minutes of hanging, the students' blood pressure dropped, breathing became difficult, and their skin turned sickly damp. According to Mödler: "What will set in after the end of the sixth minute can be foreseen by the physician: unconsciousness, intense pallor, sweating. In short: collapse due to insufficient blood supply to the heart and brain."⁴

Evidence shows that the Nazis carried out the same type of pseudo-crucifixion as a deadly form of torture. While imprisoned at Dachau, Father G Delorey was forced to watch as his doomed fellow inmates "were suspended from a horizontal bar by means of leather straps around their wrists... After their hanging for one hour the victims could no longer exhale the air that filled their chest." The only way victims could breathe normally was if they pulled their whole body up, as if performing a chin-up at the gym. This agony could go on for up to six hours. According to Delaney, "only at the end of the torture, when the victim's strength failed, did asphyxiation take place, generally within two to four minutes."⁵

Could Jesus have suffocated on the cross? If so, then he too would have raised his body in order to breathe like the Nazi torture victims. This is indeed what Pierre Barbet found when he examined the Shroud of Turin, the alleged burial shroud of Jesus.

The Shroud has been mired in controversy ever since its 'discovery' in the 14th century. It depicts a faint bloodstained image of a dead man who appears to have been beaten and crucified in the same manner as Christ. Radiocarbon tests date the Shroud to around the 14th century, suggesting that it's a forgery.⁶ Yet no one has been able to demonstrate conclusively how the image



was formed. This has led to speculation that the Shroud could be anything from an ancient X-ray triggered by a radioactive earthquake,⁷ to a secret photograph by Leonardo Da Vinci.⁸ Despite its controversial status, the Shroud is often cited as evidence in crucifixion research.

Barbet noticed that the blood emanating from The Man of the Shroud's hand wound seemed to flow in two separate directions. He wondered if the two distinct bleeding patterns were evidence of two distinct postures.⁹ If Jesus raised himself in order to breathe, we would expect his arms to pivot slightly – thus blood would drip from the hand wounds at a different angle than when his body was lowered. What Barbet needed to prove was that Christ's body sagged on the cross. He believed that Christ, like the Nazi torture victims, would have found breathing difficult in such a strained position.

The doctor scoured the hospital grounds for a suitable test subject, settling on a half-starved, wraithlike cadaver he apologetically describes as the “least ugly” he could find. Operating swiftly, so as to approximate the brusque, brutish manner of a Roman executioner, the surgeon nailed his corpse to a homebuilt cross and raised it. The results, photographed in Barbet's 1950 book *La*

Passion de N.-S. Jésus-Christ selon le chirurgien, were compelling, if a little unnerving to look at. Not only did the dead body slump as predicted, but it fell at exactly the same angle as indicated by the Shroud. Jesus's body must have sagged on the cross. The bloodstains on the Shroud suggest that he raised himself periodically to gasp for air. But when his strength gave out, he would have suffocated.

By the mid-20th century, suffocation had become the dominant explanation for Jesus's death. But debate over his death would not die so easily.

CRUCIFY THE LIVING

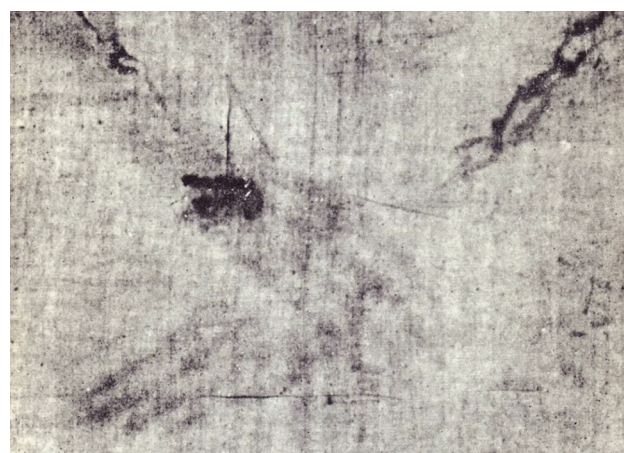
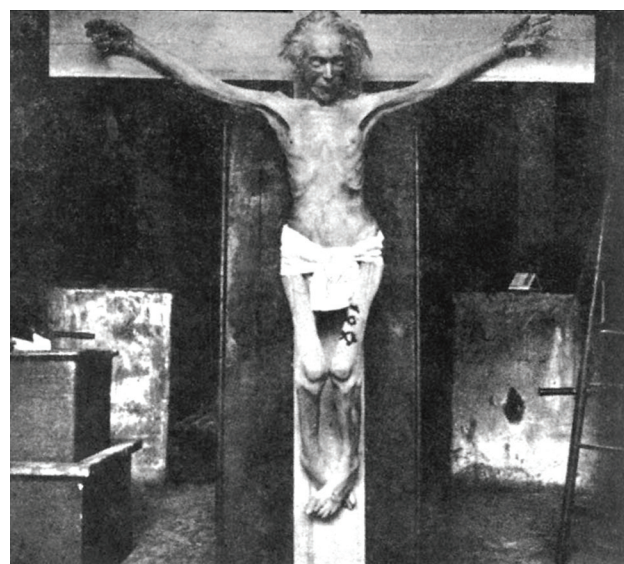
It might seem strange, but medical examiner Frederick Zugibe (1928-2013) has crucified

more people in his suburban home of Rockland County, New York, than perhaps anyone since Roman times. Armed with a steady stream of volunteers from his local church and enough medical monitoring equipment to outfit a small hospital, Zugibe has given hundreds the opportunity to feel what it's like to be Jesus.¹⁰ Granted, Jesus didn't have a team of attending physicians monitoring his every heartbeat.

Like Mödder, Zugibe used straps instead of nails to bind his subjects' hands. Unlike Mödder, who let his subjects dangle, Zugibe also bound their feet. This seems to have made all the difference. While the bodies did sag, as Barbet predicted, not one subject in Zugibe's experiments found it difficult to breathe.¹¹ What's more, contrary to Barbet's notion that Christ lifted his body on the cross periodically, Zugibe found that it was literally impossible to pull your torso up while you are crucified in that position. He asked his volunteers to push and pull their body upwards as if their life depended on it, but no one could. So even if Jesus did find breathing difficult, he would have been unable to raise himself in order to breathe easier, as did the Nazi torture victims at Dachau.

Zugibe's volunteer Christs could stay on the cross as long as they wanted, and some

DOCTOR BARBET SCoured THE HOSPITAL GROUNDS, SETTLING ON A HALF- STARVED CADAVER



ABOVE AND TOP RIGHT: Two views of a cadaver crucified by Dr. Pierre Barbet to determine the true position of Jesus on the cross (taken from his book *La Passion de N.-S. Jésus-Christ selon le chirurgien*). BOTTOM RIGHT: Barbet's theory that the bloodstains on the hand seen in the Turin Shroud are indicative of Jesus's two positions on the cross.



GETTY IMAGES

ABOVE: Restoration work on a 19th-century plaster cast. The figure was cast in 1801 from the corpse of convicted murderer James Legg as part of an experiment to settle an artistic debate. Three Royal Academicians wanted to prove their theory that most depictions of the Crucifixion were anatomically incorrect. Eminent surgeon Joseph Constantine Carpue nailed the still warm body of Legg to a cross immediately after execution. A cast was made of the cadaver when it cooled and afterwards hung in the Royal Academy.

held out for close to an hour. Their biggest complaint? Arm pain. But sore arms didn't kill Jesus, so what did?

One theory that has seen a surprising resurgence in recent years is the idea that Jesus never died on the cross. According to Dr Habib-ur Rehman, "Jesus in fact fainted on the cross, was believed dead, and recovered after a period of coma." After 'resurrecting' himself, the newly beatified Christ made the rounds in Israel before absconding east to seek out lost Hebrew tribes in India.¹²

But Rehman doesn't take into account the immense trauma Jesus suffered, especially leading up to the Crucifixion. The night before, as Jesus awaited arrest in the Garden of Gethsemane, his agony was so extreme that according to Luke: "His sweat became like drops of blood".¹³ Christ was then marched for miles without sleep, after which he was

scourged to within an inch of his life. As Zugibe notes, the scourging whips of Roman times were often tipped with metal weights powerful enough to break bones and cause significant internal and external bleeding. Piercing lacerations from the crown of thorns would only worsen this blood loss.¹⁴

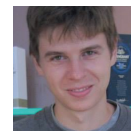
By the time Christ arrived at Calvary bearing his cross, he was already in very bad shape. Add to that the trauma of being nailed through the hands and feet and you have a recipe for what Zugibe calls hypovolemic shock, a condition caused by severe loss of blood and bodily fluids. Simply put, Jesus lost so much blood that his heart could no longer supply his organs with the oxygen they needed, and he died.

So there you have it; or, well, you don't. We're only scratching the surface. Hematidrosis, trigeminal neuralgia, fatal

acidosis¹⁵ – Jesus has been posthumously diagnosed with enough scary sounding medical conditions to fill a Robin Cook novel. Zugibe may be the most thorough crucifixion researcher of the bunch, but there is still widespread disagreement as to whether his hypovolemic shock theory, or any theory for that matter, is correct.

And seeing that there is no irrefutable forensic evidence from Christ's Passion, it looks as if many more will be pinned to the cross before crucifixion scientists are satisfied. **FT**

AUTHOR BIOGRAPHY



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NOTES

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