The correct anatomical representation of the crucifixion of Jesus proof via anatomical data.

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ABSTRACT: The crucifixion of Jesus has been a favorite subject of research throughout the centuries for historians, theologysts, medical doctors and artists. The objective of this study is to present a rare case in international iconography of a representation of Jesus on the cross that is anatomically correct.

Key Words: Jesus Christ, Crucifixion, Anatomy.

INTRODUCTION

Crucifixion has long been known as a method of execution as it was first practiced by the Persians¹,²,³. Alexander the Great adopted it and through his extensive conquests, it was transferred to Egypt, Carthage and Rome. Crucifixion was a common form of capital punishment in Roman times for traitors, rebels and slaves⁴,⁵. Romans made some modifications to the shape of the cross³.

It was considered the cruelest and most tortuous method of execution. Cicero who witnessed an execution by crucifixion characterized it as “crudelissimum, teterrimum supplicium” the cruelest and most atrocious punishment⁶.⁷ The purpose of condemning someone to die by crucifixion was not just to kill him, but to offer him a slow and agonizing death⁶: “man’s inhumanity to man”⁷.

The expanse of the Roman Empire being what it was it is very curious that the representation of Jesus’ crucifixion presents such discrepancies between reality and art as we often meet in international iconography. Even now after scientific data proving otherwise the representation of Jesus on the cross seems not to be in accordance with anatomic details.

DISCUSSION

In order to understand the details of crucifixion and the “preliminaries” to it, it is necessary to describe the technique, to which the Roman executioners were very well trained because of its frequent use

Prior to crucifixion the man was undressed, his hands were tied on an upright post against the wall, and the back, buttocks and legs were flogged with a whip (flagellum) which consisted of some leather thongs on which small iron balls were tied at intervals. The intention of flogging was to torture and weaken the victim. As the torturer struck the man’s back the iron balls would lacerate the skin and underlying skeletal muscles producing bleeding and unbearable pain⁸.

The technique of crucifixion consisted of extending the victims arms on the horizontal mobile part of the cross (patibulum) which was lying on the ground and nailing an iron spike at each wrist. Then the patibulum was lifted from the ground to the top of the stipes (the upright part of the cross), which was permanently fixed to the ground⁹. Finally either one spike was nailed in each foot or one spike for both feet after joining them together between the second and third metatarsals and the crucifixion was completed¹.
When on the cross the most burdensome suffering of the victim was the inability to breathe and especially exhale\(^2\). The position of the arms on the patibulum affected the breathing difficulty. The more the arms were extended the more severe the breathing difficulty became\(^1,12\). The difficulty in exhalation was due to the fact that because of the extension of the arms and the downward pull of the weight of the body, the ribs were immobilized and the contraction of the respiratory muscles (diaphragm and thoracic muscles which connect adjoining ribs) became practically impossible. Thus the crucified individual was obliged to rest on the nails at his feet in order to lift up his body and breathe. By this action the respiratory muscles could contract. Every time the victim tried to rise his body in order to breathe the position of his wrists changed causing excruciating pain due to the laceration of the median nerve from the spike\(^1,2,8,12\). This was repeated continuously until the victim became exhausted and could not lift himself up leading to death from asphyxia\(^1,3,4,6,9,11\).

Barbet\(^1\) in repeated experiments on corpses proved that, no matter in which point of the wrist the spike was nailed in, once it had passed through the soft parts and entered fully in to the wrist, it was automatically guided in such a way that it emerged through the skin at the back of the wrist at about one centimeter above the point of entry, passing through the Destot’s space, a free space enclosed by the capitates, lunate, triquetal and hamate bones of the wrist, without fracturing any of them (Figure 1).

In the usual representation of Christ on the cross the spikes are shown to be among the metacarpal bones. If this was the case, because of the weight of the body and since there are no ligaments strong enough between these bones, the tissues would tear and the body would fall down. But in the wrist, bones are connected by strong ligaments\(^10\) that can hold the weight of the body.

It is most peculiar why iconographers have failed to reproduce this anatomically accurate position despite detailed description of the technique of crucifixion and scientific proof. In various Christian churches in many countries of the world at least to our knowledge all the icons of Jesus’ crucifixion are wrongly represented. The only case known to us that the nails are at the anatomically correct position seems to be in Dom Bosco Sanctuary also known as the Blue Church of Brasilia.

The Dom Bosco Sanctuary was built in honor of the patron saint of the city, Saint Giovanni Melchior Bosco, an Italian priest who visited the area in search of the Promised Land after dream he had in 1883. It was designed by Carlos Alberto Naves and is made of 80 concrete 16 meter high columns with a gothic arc ending and stained glass walls made of 12 different hues of blue and white representing the starry sky. Behind the altar made of a single piece of over 10 Tons of pink marble stands the 8 meter high cross with a 4.3 meter high Christ sculpted by Gotfredo Traller. In this crucifix the arms are well extended and the spikes are properly represented inserted through the wrist and not through the metacarpals.

Although it is probably customary to represent religious icons in a consistent way and inspired from previous works of art, we found it satisfying to see at least one case where the artist chose to differ and produce a representation close to historic and scientific facts.

**CONCLUSION**

The common representation of Jesus’ crucifixion on the cross is not in accordance with the historic and
anatomic data and related research. A rare case is presented where the crucifix is represented in the anatomically correct way and the spikes are inserted in the wrist and not through the palm of the hand in Dom Bosco Sanctuary also known as the Blue Church of Brasilia.

 REFERENCES