Publicación cuatrimestral del Hospital Universitario "General Calixto García" | Editorial de Ciencias Médicas



Archivos del Hospital Universitario "General Calixto García" AÑO 2023 VOL. XI NO. 3 ISSN 2707-9120



Letter to the Editor

# **Epiphany of Traumatic Cardiac Injuries**

Epifanía de las lesiones cardíacas traumáticas

### Dear Editor:

It is a great encouragement to find articles that address the subject of thoracic trauma in the scientific literature, even more so when they are linked to secondary cardiac injury, resulting in entities that currently present different mortality rates. The report of cardiac injuries secondary to trauma has an increased incidence due to several factors such as the increase in the rates of violence and traffic accidents, among others. Thanks to scientific advances, new techniques for the diagnosis and treatment of these traumas have been developed, and higher survival rates that can be influenced by factors such as: type of trauma, place where it occurs, travel time to a health center, and human and material resources available in the center for the resolution of the damage, are currently being informed. Cardiac injuries resulting from closed chest trauma are not very frequent, which is why the article by Stable et al.<sup>(1)</sup> is of great interest and represents a valuable contribution.

When writing a scientific article, the historical approach that marks a milestone for medicine should not be disregarded, so verifying whether there is an adequate correlation between the event to be reported and what was originally described in the publications cited and referenced as supporting information, is of vital importance; to this end, primary or secondary sources that do not only involve

#### How to quote this article

Medrano Plana Y, Hernández Borrot C. Epiphany of traumatic cardiac injuries. Arch Hosp Univ "Gen Calixto García". 2023;11(3):403-5. Acceso: 00/mes/2023. Disponible en: https://revcalixto.sld.cu/index.php/ahcg/article/view/e1143/954 the medical sciences, but also social sciences and humanities should be consulted.<sup>(3)</sup>

The case published by Stable et al.,<sup>(1)</sup> calls attention to the data used for the description of the first historical mentions of a cardiac injury. In this respect, it is necessary to make some clarifications about the aforementioned "Edwin Smith Papyrus" and the death of Sarpedon, described in Homer's "Iliad":

Firstly, and as it has been published,<sup>(4)</sup> there are currently some scientific articles, such as that of Stable et al.,<sup>(1)</sup> that usually cite the "Edwin Smith Papyrus" as the first historical description of a cardiac injury. However, this document, which should certainly be referred to as "The Edwin Smith Surgical Papyrus" and that is little more than an English translation of an ancient Egyptian papyrus made by James Henry Breasted, and published in 1930, does not describe any cardiac lesion among the 42 included in it. Therefore, it should not be considered as part of the documents that support the historical origin of cardiac injuries, from our point of view.

As for the death of Sarpedon -narrated in the book 16 of the Iliad-, this occurs when he is hit by the spear thrown by Patroclus during a battle. Eleven of several editions of this Greek work, which has been translated into English and Spanish and published in these two languages<sup>(4)</sup>, have been analyzed to determine that this fact is unclear, since in many editions of this work, different anatomical structures are named as the one finally injured during the confrontation; some specific structures include: heart, pericardium or diaphragm and others less defined include: middle abdomen, entrails, or simply in the chest near the heart. This varied range of possible structures injured during the trauma caused to Sarpedon by the spear is related to the translations made into various languages from the ancient Greek used by Homer, in which there are Greek words "πραπίδες" or "φρένες" that can be interpreted in multiple ways; but in the specific case of the Spanish translation referenced by Stable et al.<sup>(1)</sup> it set out in detail that: "... hit Sarpedon and wounded him in the tissue that envelops the dense heart", which anatomically does not refer to the heart but to the pericardium as the injured structure. Upon exhaustively reviewing this Greek work, it has been concluded that the most irrefutable example of the first historical description of a cardiac injury by trauma is the death of Alkatoo -due to a wound in this organ, secondary to a penetrating thoracic trauma by the spear thrown by Idomeneo in the middle of the battle, which was narrated in the book 13-. This incident agrees with the detailed analyses made in all consulted translations.<sup>(4)</sup>

Finally, and coinciding with the conclusions of the work published by King and Green,<sup>(5)</sup> a specific emphasis should be made on the importance of the time spent by authors and editors in reviewing the historical issues of the manuscripts intended for publication in order to achieve an adequate recognition of the most reliable milestones that occurred over time, as well as to accurately contribute to the development of science.

Yuri Medrano Plana<sup>1\*</sup> <u>https://orcid.org/0000-0001-5256-7250</u>

Carlos Enrique Hernández Borroto<sup>2</sup> <u>https://orcid.org/0000-0001-5376-4918</u>

<sup>1</sup>Lay University Eloy Alfaro de Manabí, Faculty of Health Sciences, Manta, Ecuador.



#### Página 404

Este es un artículo en Acceso Abierto distribuido según los términos de la <u>Licencia *Creative Commons*</u> <u>Atribución–No Comercial 4.0</u> que permite el uso, distribución y reproducción no comerciales y sin restricciones en cualquier medio, siempre que sea debidamente citada la fuente primaria de publicación. <sup>2</sup>North Metropolitan Health Service, Santiago de Chile, Chile.

\*Corresponding author: <u>yuri.medrano@uleam.edu.ec</u>

## REFERENCES

1. Stable Jurquín Y, Milián Valdés D, Rodríguez Ortega N. Herida cardiaca en trauma cerrado de tórax. Arch Hosp Univ "Gen Calixto García". 2021;9(1):161-8. Acceso: 23/08/2023. Disponible en: <u>https://revcalixto.sld.cu/index.php/ahcg/article/view/e600</u>

2. Bârsu C. History of Medicine between tradition and modernity. Clujul Med. 2017;90(2):243-5. Access: 15/8/2023. Available from: <u>https://doi.org/10.15386/cjmed-794</u>

3. Rodríguez de Romo AC. La Historia de la Medicina es una ciencia. Gac Med Mex. 2018;154:5-7. Acceso: 23/08/2023. Disponible en: <u>http://dx.doi.org/10.24875/GMM.17003951</u>

4. Medrano Plana Y, Hernández Borroto CE. El verdadero origen histórico del trauma cardiaco penetrante. Rev Colomb Cir. 2024;39. Acceso: 23/08/2023. Disponible en: <u>https://www.revistacirugia.org/index.php/cirugia/article/view/2395</u>

5. King H, Green MH. On the misuses of medical history. Lancet. 2018;391:1354-5. Access: 15/8/2023. Available from: <u>https://doi.org/10.1016/S0140-6736(18)30490-2</u>

Received: 05/09/2023. Approved: 11/10/2023.



Página 405

Este es un artículo en Acceso Abierto distribuido según los términos de la <u>Licencia Creative Commons</u> <u>Atribución–No Comercial 4.0</u> que permite el uso, distribución y reproducción no comerciales y sin restricciones en cualquier medio, siempre que sea debidamente citada la fuente primaria de publicación.