Sri Lanka Journal of Forensic Medicine, Science & Law — June 2026;17(Special Issue):12-14
DOI: https://doi.org/10.4038/sljfmsl.v17i5.8078

CASE REPORT

ASSAULT-RELATED INJURIES COMPLICATED BY IATROGENIC ANAPHYLAXIS AND TAKOTSUBO CARDIOMYOPATHY: A MEDICO-LEGAL DILEMMA

Haroon AM*
Department of Forensic Medicine and Toxicology, Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

ABSTRACT

Introduction: Anaphylaxis is a severe allergic reaction that can affect breathing and blood circulation. It requires immediate treatment with adrenaline. Stress cardiomyopathy, also known as Takotsubo syndrome, is a temporary heart condition that mimics a heart attack but occurs without blockage of coronary arteries. It can be triggered by physical or emotional stress, including high levels of catecholamines. In medicolegal practice, complications that arise during the treatment of assault injuries may raise questions about the category of hurt. Proper evaluation depends on clear documentation of events and their sequence.

Case Presentation: A 61-year-old man was admitted with superficial injuries after an assault. These injuries were assessed as non-grievous. During routine treatment with oral amoxicillin clavulanate, he developed acute anaphylaxis requiring urgent treatment with adrenaline. Further evaluation showed stress cardiomyopathy, with no evidence of coronary artery obstruction. He recovered with supportive care. Although the original injuries were not life-threatening, a serious complication occurred during treatment. The Medico-Legal Examination Form (MLEF) clearly documented the sequence of events and their temporal relationship. The initial injuries remain classified as non-grievous, and the final legal interpretation is a matter for the judiciary.

Conclusion: The original injuries were superficial and non-grievous. During treatment, the patient developed anaphylaxis followed by stress cardiomyopathy, resulting in a life-threatening situation. The MLEF clearly documented the sequence of events, establishing both a temporal relationship and a reasonable causal link between the assault, subsequent treatment, and the complications that followed. While the injuries remain classified as non-grievous, the overall medicolegal interpretation, including the extent of legal responsibility, is a matter for judicial evaluation.

Corresponding author: Haroon AM
m24798@pgim.cmb.ac.lk
https://orcid.org/0009-0008-0435-1744

ARTICLE HISTORY
Received: 06.11.2025
Received in revised form: 20.02.2026
Accepted: 11.05.2026
Available online: 10.06.2026

Keywords: *Anaphylaxis; medico-legal evaluation; stress cardiomyopathy*

INTRODUCTION

Anaphylaxis is a severe allergic reaction that can affect breathing and blood circulation. It requires immediate treatment with adrenaline[1,2]. Stress cardiomyopathy, also known as Takotsubo syndrome, is a temporary heart condition that mimics a heart attack but

occurs without blockage of coronary arteries[3]. It can be triggered by physical or emotional stress, including high levels of catecholamines[3,4]. In medicolegal practice, complications that arise during the treatment of assault injuries may raise questions about the category of hurt. Proper evaluation depends on clear documentation of events and their sequence.

CASE PRESENTATION

A 61-year-old man was admitted to a tertiary care hospital two days after an assault by three known individuals. He was conscious and hemodynamically stable on admission. Examination showed multiple abrasions and contusions over the limbs and back. There was no head injury, fractures, or internal organ damage. Investigations were normal. Based on these findings, the injuries were categorized as non-grievous under Section 311 of the Penal Code of Sri Lanka.

He was started on oral amoxicillin clavulanate. Within 30 minutes, he developed symptoms of anaphylaxis, including shortness of breath, hypotension, tachycardia, and urticaria. He was treated with intramuscular adrenaline (0.5 mg, repeated at ten-minute intervals), oxygen, intravenous fluids, antihistamines, and bronchodilators. His condition stabilized.

Subsequently, the electrocardiogram (ECG) showed ST elevation. Serum troponin I was elevated (initially 191 ng/L, with later values decreasing). Echocardiography showed apical ballooning, and coronary angiography revealed normal coronary arteries. These findings were consistent with stress cardiomyopathy (Table 1).

Table 1: Diagnostic features of stress cardiomyopathy

Parameter	Finding	Interpretation
ECG	ST elevation	Resembles ST elevation myocardial infarction (STEMI)
Troponin I	191 ng per litre (elevated/ normal <10-20 ng/L)	Indicates myocardial injury
Echocardiography	Apical ballooning without obstruction	Consistent with stress cardiomyopathy
Coronary angiography	Normal coronary arteries	Non-ischaemic origin confirmed

He was managed with monitoring and beta blockers and discharged after seven days. Follow-up confirmed recovery of heart function. The Medico-Legal Examination Form (MLEF) clearly documented the initial assault and injuries, the development of anaphylaxis after treatment and the subsequent cardiac complication. The injuries were classified as non-grievous, as they did not independently endanger life. However, the MLEF remarks column clearly recorded the full chronological sequence of hospital events and established a temporal connection between the assault, treatment, and complications. At present, the category of hurt remains non-grievous based on the original injuries. The subsequent life-threatening complication is documented as part of the clinical course.

DISCUSSION

This case shows how a patient with initially non-grievous injuries can later develop a serious complication during treatment. The assault led to hospital admission and routine care, during which the patient developed anaphylaxis after receiving antibiotics. This reaction was sudden and unpredictable, and it required immediate treatment.

Following this, the patient developed stress cardiomyopathy, which is known to occur after severe physical stress or due to high levels of

catecholamines. In this case, both the anaphylactic reaction and the administered adrenaline may have contributed to the cardiac changes.

From a medicolegal point of view, the important factor is the clear sequence of events. The injuries were correctly identified as non-grievous at the time of examination. However, the MLEF clearly documents the later complications and shows how they are temporally related to the initial assault and subsequent treatment. Therefore, while the classification of hurt remains based on the original injuries, the full clinical course must be considered. The final interpretation of these findings is a matter for the judiciary.

CONCLUSION

The original injuries were superficial and non-grievous. During treatment, the patient developed anaphylaxis followed by stress cardiomyopathy, resulting in a life-threatening situation. The MLEF clearly documented the sequence of events, establishing both a temporal relationship and a reasonable causal link between the assault, subsequent treatment, and the complications that followed. While the injuries remain classified as non-grievous, the overall medicolegal interpretation, including the extent of legal responsibility, is a matter for judicial evaluation.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the guidance and supervision of Prof. Asela Mendis, Head of the Department of Forensic Medicine and Toxicology, Faculty of Medicine, University of Colombo.

CONFLICTS OF INTEREST

The authors declared no conflicts of interest.

ETHICAL ISSUES

The presented case was conducted for medicolegal purposes, and the findings were used for academic purposes, according to the institutional guidelines, without divulging the identity of the individual.

SOURCES OF SUPPORT

None.

AUTHOR CONTRIBUTIONS

AMH: Conception and design of the work; the acquisition, analysis, and interpretation of data for the work; drafting the work and revising it critically for important intellectual content; final approval of the version to be published; and agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

REFERENCES

1. Simons FER, Ardusso LRF, Bilo MB, *et al*. World Allergy Organization guidelines for the assessment and management of anaphylaxis. World Allergy Organ Journal. 2011;4(2):13–37. https://doi.org/10.1097/WOX.0b013e318211496c.

2. The Working Group of Resuscitation Council UK. *Emergency treatment of anaphylaxis: Guidelines for healthcare providers*. London: Resuscitation Council UK; 2021. Available from: https://www.resus.org.uk/sites/default/files/2021-05/Emergency%20Treatment%20of%20Anaphylaxis%20May%202021_0.pdf [Accessed 20th February 2026].

3. Lyon AR, Bossone E, Schneider B, *et al*. Current state of knowledge on Takotsubo syndrome: A position statement from the taskforce on Takotsubo syndrome of the Heart Failure Association of the European Society of Cardiology. *European Journal of Heart Failure*. 2016;18(1):8–27. https://doi.org/10.1002/ejhf.424.

4. Turner PJ, Jerschow E, Umasunthar T, Lin R, Campbell DE, Boyle RJ. Fatal anaphylaxis: Mortality rate and risk factors. *The Journal of Allergy and Clinical Immunology: In Practice*. 2017;5(5):1169–1178. https://doi.org/10.1016/j.jaip.2017.06.031.