

# THORACIC TRAUMA IN A REFERENCE CENTER OF THE COLOMBIAN NORTHEAST: DESCRIPTIVE STUDY

## AUTHORS

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## INTRODUCTION

Thoracic trauma represents 10 to 15% of all traumas. Our institution is the main trauma referral center in the northeastern region of the country and the behavior of thoracic trauma in our population is totally unknown.

## OBJECTIVE

To determine the prevalence and describe the behavior of thoracic trauma in patients treated at the Erasmo Meoz University Hospital during the period 2018 to 2021.

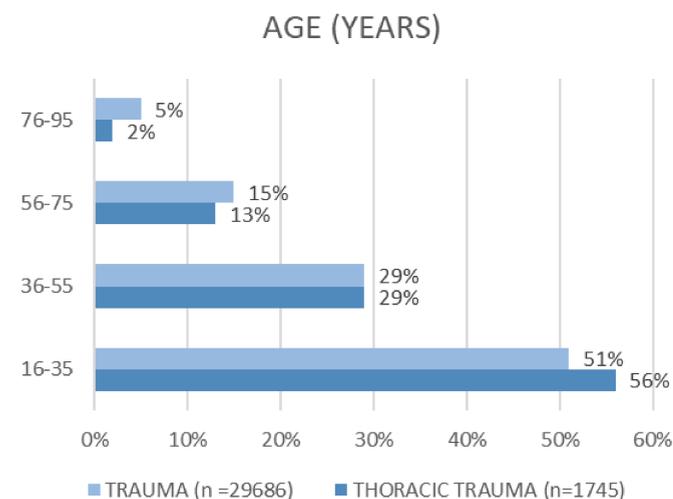
## METHODOLOGY

A descriptive, observational, cross-sectional and retrospective study was carried out, collecting data on 31,431 patients consecutively admitted to the emergency department for trauma, of whom 1,745 suffered thoracic injuries. It was described in terms of frequencies, percentages and measures of central tendency.

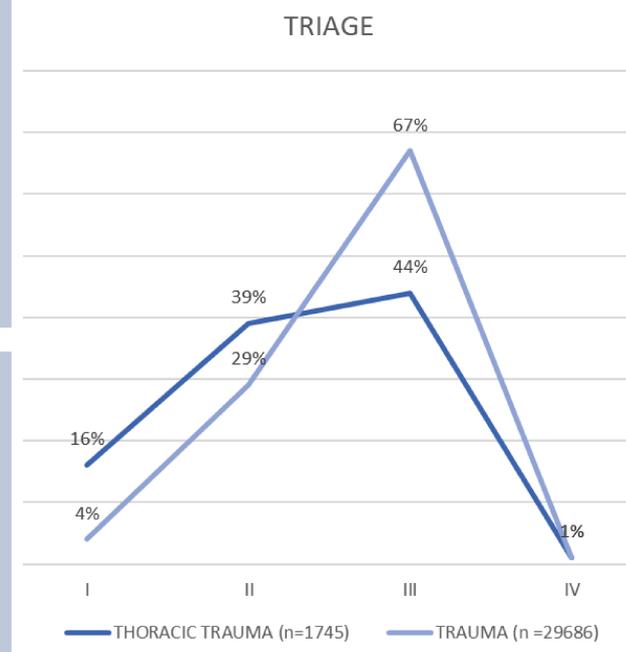
## RESULTS

It was found that 6 out of every 100 patients admitted for trauma presented thoracic trauma, and the predominant age range was between 16-35 years, of which 81% were male. The most frequent type of injury was chest wall injuries and contusions in 36%.

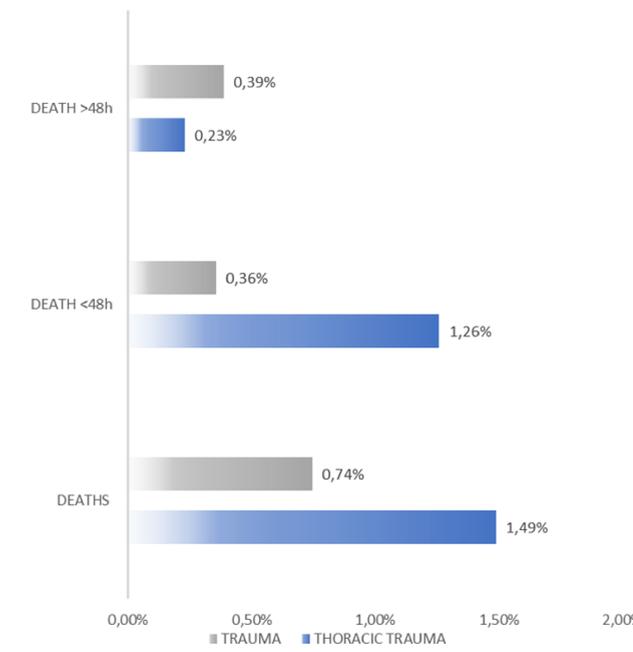
GENDER	THORACIC TRAUMA (n=1745)(%)	TRAUMA (n=29686)(%)	TOTAL TRAUMA (n=31431)(%)
MALE	1413 (81)	20020 (67)	21433 (68)
FEMALE	332 (19)	9666 (33)	9998 (32)



Regarding the severity with which patients with thoracic trauma are admitted, 44% are recognized as triage III, 39% as triage II, while trauma in general, 67% are recognized as triage III.



In 2021, only 15% of patients underwent a surgical procedure, and closed thoracostomy for drainage was the most common in 9% of patients, followed by thoracoscopic lung decortication.



The case fatality rate for chest trauma was 1.5%, and for trauma, in general, was 1%. 100% and 67% of those missing due to chest trauma and trauma, in general, were all male, respectively. 85% of patients who die from chest trauma die within 48 hours, while 48% of patients who die from trauma generally fail within the same period.

## CONCLUSIONS

In our population, as in other studies, the male sex is the most affected and present at an early age. Most patients who die from a traumatic chest injury do so in less time than those with other traumas. According to the admission triage, most thoracic trauma patients were admitted in serious condition. This research should lead to further studies in our population that analyze the association between chest trauma and morbidity and mortality. Likewise, it is crucial to know outcomes such as years of life loss or disability in patients with thoracic trauma.

