

Trauma and motorcycling: patterns, drugs use and outcomes..

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Abstract

Trauma is a current public healthcare problem that mainly affects the younger and more active population. The study of associations, patterns, outcomes and particularities related to trauma is the first line in creating better ways to prevent it.

Key words:

Trauma, Motorcycling, Drugs.

Introduction

The definition of Trauma is any event of transfer of mechanical, thermal, electrical or chemical energy or the absence of vital elements such as heat and oxygen, which causes a structural alteration.

Trauma is considered a serious public health problem, especially in developing countries such as Brazil, which in 2011 trauma was considered the leading cause of mortality in individuals aged 20-29 years (71.44% of cases). The use of psychoactive substances (SPA), whether legal or illegal, is commonly associated with physical trauma.

In countries with a huge social inequality, such as Brazil, the access for types of transportation are not simple. The motorcycle ends up being most present in the population because of the most affordable price range.

This study aims to analyze and seek a more solid relationship between the impact of the use of SPA and traumas on motorcyclists and its impact on the traumatic, social, and occupational outcomes of the traumatized patients in the Hospital de Clínicas da Unicamp (HC) in 2013.

Results and Discussion

78 patients who met the study requirements were selected, 93% male and 7% female. The mean age of the study was 27.7 years, compatible with the age group with the highest mortality for trauma.

For each patient, different trauma scores, RTS, ISS and TRISS were analyzed. Different reference values were used for each score, based on risk for higher mortality. Being: ISS > 15, RTS < 5 and TRISS < 90%. Applying those, 30 (39%) patients had ISS > 15, 10 (13) patients with TRISS < 90% and 5 (7%) with RTS < 5. 24 patients had a positive toxicological result at the time of initial care, 10 (13,7%) tested positive for alcohol, 12 (16%) for cocaine and 9 (12%) for cannabis. 58% of the patients tested negative for substances.

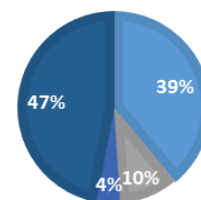
22 (28,2%) of the patients had hemorrhage, and 14% (11) needed blood transfusion.

46,2% (36) of the patients were brought wearing helmet at the moment of the trauma.

The table 1 show the distribution of surgeries by speciality at admission in the hospital.

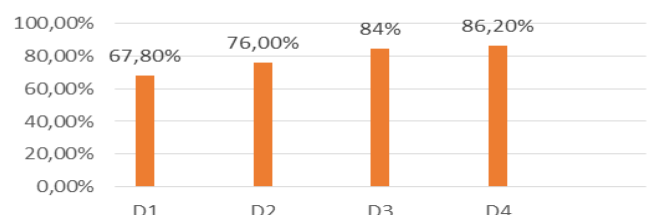
SURGERIES BY SPECIALITY

■ Orthopedics ■ neurosurgery ■ Vascular ■ Trauma



We were able to contact 29 patients of the study 5 years after the trauma, to analyse outcomes of the trauma, life quality (using the WHOQOL-BREF) and the work situation. 62% of those had permanent physical sequelae. 52% were unemployed, 31% retired and only 17% were working. The table 2 shows the mean score of quality life using the domains described in the WHOQOL-BREF (scale in 1 to 5).

Frequencies



Conclusions

The small number of patients that fit the study objectives limited a broad analysis of the association between the variables, which in this study were not statistically significant. Although we have not been able to demonstrate statistical significance, it was possible to notice that the majority of patients interviewed had a significant decrease in the quality of life after the accident, and most of them had their work situation drastically affected. Most of the patients needed surgical procedures (83%), evidencing the strong impact of trauma on hospital costs. This shows the greater need for research aimed at the impact of trauma in the short and long term.

Acknowledgement

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1. The Whoqol Group: The word Health Organization Quality of Life Assessment (WHOQOL): Position paper from the Health Organization. Soc. Sci. Med, 1995, 41(10):1403-1409.