

# The 2<sup>nd</sup> International Neurotrauma Congress & the 4<sup>th</sup> International Roads Safety Congress

Shefa Neuroscience Research Center, Tehran, Iran, 18-20 February, 2015

### The Neuroscience Journal of Shefaye Khatam

Volume 2, No. 4, Suppl. 3

## Oral Presentation

#### Crash Investigation: powerful tool to assess vehicle safety

Mehdi Shafieian\*

Department of Biomedical Engineering, Amirkabir University of Technology, Tehran, Iran.

Published: 18 February, 2015

#### **Abstract**

Motor vehicle crashes are among the leading causes of traumatic injuries and mortalities in Iran. Understanding the injury process is the first step to predict and later on preventing the injuries. Among the main factors that are defined as the cause of a motor vehicle crash (human, road, and vehicle), the vehicle performance is one the most important factor that contributes to the injury since traumatic injury is defined as a process rather an event. Crash investigation and evaluation of the vehicle performance are the basic elements that define the injury causation scenario. The process of crash investigation combines the collected data from the crash scene with professional multidisciplinary analysis of medical and engineering evidence to determine the injury causation in every case. This process aims to improve the prevention of motor vehicle crash injuries to reduce deaths, disabilities, and human and economic costs.

**Keywords:** Traumatic Injuries, Vehicle, Multidisciplinary Analysis.

\*Corresponding Author: Mehdi Shafieian

E-mail: Shafieian@aut.ac.ir