

## Acknowledgment

Thanks to Allah, most merciful, most graceful and most compassionate, for giving me the help and patience to achieve this work.

It is a great pleasure to express my sincere gratitude to **Prof. Dr. Eman Adel Seif**, *Professor of Forensic Medicine and Clinical Toxicology, Faculty of Medicine, University of Alexandria*, for her parenthood attitude, moral support, and endless scientific advice.

My gratitude and thanks go to **Dr. Fatma Mohamed Magdi Abd El Salam Badr Eldine**, lecturer of Forensic Medicine and Clinical Toxicology, Faculty of Medicine, *University of Alexandria*, for her generous efforts, keen supervision and meticulous guidance in the details of this work.

I would like to express my gratitude to the patients in this work, may Allah bless them all.

I extend my sincere thanks to everyone who in one way or another has contributed to the successful completion of this project.

# LIST OF CONTENTS

<b>Chapter</b>	<b>Page</b>
<b>ACKNOWLEDGMENT.....</b>	<b>i</b>
<b>LIST OF CONTENTS .....</b>	<b>ii</b>
<b>LIST OF TABLES .....</b>	<b>iii</b>
<b>LIST OF FIGURES .....</b>	<b>iv</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>v</b>
<b>I. INTRODUCTION.....</b>	<b>1</b>
Definition of an elderly person.....	1
Impact of aging on the occurrence and outcome of injury.....	2
Classification of the most commonly encountered injuries among elderly population.....	2
Trauma scoring systems .....	13
<b>II. AIM OF THE WORK .....</b>	<b>16</b>
<b>III. PATIENTS.....</b>	<b>17</b>
<b>III. METHODS .....</b>	<b>18</b>
<b>IV. RESULTS .....</b>	<b>27</b>
<b>V. DISCUSSION.....</b>	<b>50</b>
<b>VI. SUMMARY .....</b>	<b>57</b>
<b>VII. CONCLUSIONS .....</b>	<b>60</b>
<b>VIII. RECOMMENDATIONS.....</b>	<b>61</b>
<b>IX. REFERENCES.....</b>	<b>62</b>
<b>PROTOCOL</b>	
<b>ARABIC SUMMARY</b>	

# LIST OF TABLES

<b>Table</b>		<b>page</b>
<b>(1)</b>	Shows coded values of each parameter in RTS	<b>19</b>
<b>(2)</b>	Shows the three parameters of the patient's best response to calculate the GCS	<b>20</b>
<b>(3)</b>	The Abbreviated Injury Scale, 1985	<b>22-25</b>
<b>(4)</b>	Distribution of the studied patients (n = 104) according to demographic data	<b>28</b>
<b>(5)</b>	Distribution of the studied patients (n = 104) according to site of injury	<b>35</b>
<b>(6)</b>	Distribution of the studied patients (n = 104) according to type of injury	<b>36</b>
<b>(7)</b>	Statistical analysis of TRISS	<b>37</b>
<b>(8)</b>	Relation between TRISS (%) and age	<b>37</b>
<b>(9)</b>	Relation between TRISS (%) and site of injury	<b>38</b>
<b>(10)</b>	Relation between TRISS (%) and type of injury	<b>39</b>
<b>(11)</b>	Statistical analysis of hospital stay	<b>41</b>
<b>(12)</b>	Correlation between hospital stay with TRISS (%)	<b>41</b>
<b>(13)</b>	Relation between hospital stay (days) and age	<b>42</b>
<b>(14)</b>	Relation between hospital stay (days) and site of injury	<b>42</b>
<b>(15)</b>	Relation between hospital stay (days) with type of injury	<b>43</b>
<b>(16)</b>	Relation between outcome and age	<b>45</b>
<b>(17)</b>	Relation between outcome and type of injury	<b>46</b>
<b>(18)</b>	Relation between outcome and site of injury	<b>47</b>
<b>(19)</b>	Relation between outcome and TRISS (%)	<b>48</b>
<b>(20)</b>	Relation between outcome and hospital stay (days)	<b>49</b>

## LIST OF FIGURES

Figure		Page
1.	Distribution of the studied patients (n = 104) by age	29
2.	Distribution of the studied patients (n = 104) by sex.	29
3.	Distribution of the studied patients (n = 104) by marital status	30
4.	Distribution of the studied patients (n = 104) by smoking habits	30
5.	Distribution of the studied patients (n = 104) by residency	31
6.	Distribution of the studied patients (n = 104) by history of chronic illness	31
7.	Distribution of the studied patients (n = 104) by history of previous injury	32
8.	Distribution of the studied patients (n= 104) according to disability for daily activities	32
9.	Distribution of the studied patients (n = 104) according to month of admission	33
10.	Distribution of the studied patients (n=104) according to place of injury	33
11.	Distribution of the studied patients (n = 104) according to circumstances of injury	34
12.	Distribution of the studied patients (n=104) according to cause of injury	34
13.	Distribution of the studied patients (n=104) according to site of injury	35
14.	Distribution of the studied patients (n=104) according to type of injury	36
15.	Relation between TRISS (%) and type of injury	39
16.	Distribution of the studied patients (n=104) according to treatment received	40
17.	Correlation between hospital stay with TRISS (%)	41
18.	Relation between hospital stay (days) with type of injury	43
19.	Distribution of the studied patients (n=104) according to the outcome	44
20.	Relation between outcome and TRISS (%)	48
21.	Relation between outcome and hospital stay (days)	49

## **LIST OF ABBREVIATION**

<b>AAAM</b>	: Association for the Advancement of Automotive Medicine
<b>AIS</b>	: Abbreviated injury scale
<b>CT</b>	: Computed tomography
<b>DM</b>	: Diabetes Mellitus
<b>DSM-IV</b>	: The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders
<b>ED</b>	: Emergency Department
<b>GCS</b>	: The Glasgow Coma Scale
<b>GLF</b>	: Ground level fall
<b>ISS</b>	: Injury Severity Score
<b>MTOS</b>	: Major Trauma Outcome Study
<b>NISS</b>	: New Injury Severity Score
<b>PMC</b>	: Pre-existing medical conditions
<b>ProFaNE</b>	: Prevention of Falls Network Europe
<b>Ps</b>	: Probability of survival
<b>PTSD</b>	: Post-traumatic stress disorder
<b>RTS</b>	: The Revised Trauma Score
<b>SD</b>	: Standard deviation
<b>SDH</b>	: Subdural hematomas
<b>SPSS-9</b>	: Statistical Package for Social Sciences version 9
<b>TBI</b>	: Traumatic brain injury
<b>TBSA</b>	: Total body surface area
<b>TRISS</b>	: Trauma score-Injury Severity Score
<b>U.S.</b>	: United States
<b>WHO</b>	: World Health Organization
<b>X<sup>2</sup></b>	: Chi-square

