The Definition of Polytrauma: The Need for International Consensus

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Declarations

Statement of Originality
The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository, subject to the provisions of the Copyright Act 1968.

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I hereby certify that the work contained within the publication found in Appendix 1 of this thesis has been done in collaboration with other researchers of the International Working Group on Polytrauma, of which I am a member. Included within this publication is a statement clearly outlining the extent of collaboration, with whom and under what auspices.

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Statement of Contribution of Authors

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National meeting:

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Abstract

The use of the term polytrauma is inconsistent and lacks validation. While numerous definitions have been used interchangeably over the last half-century no attempt has been made to validate any of these definitions nor examine their accuracy in defining the polytrauma patient. Out of this setting comes the aim of this thesis - the development of an internationally validated consensus definition of polytrauma.

A universally accepted definition of polytrauma is vital for accurate scientific communication, epidemiological understanding, monitoring of outcomes and benchmarking of trauma care. Without a validated and clear consensus definition, meaningful comparisons between institutional datasets are hampered and further advances hoped for in trauma research may be impeded by imprecise definitions of their included ‘polytrauma’ patients. To carry out the aim of this thesis a literature review and four clinical studies were conducted. An International Working Group on Polytrauma was also established.

This thesis will describe the historical evolution of the term polytrauma, detailing its peculiar geographical and cultural differences and establish, through a review of the literature, the lack of a consensus and validated definition. Through four clinical studies it will: 1) examine the key components, specifically the anatomical description and physiological parameters, that must be included in any definition of polytrauma; 2) address the challenges faced in defining polytrauma adequately in the current context and; 3) summarise the international consensus process that has evolved out of this thesis to provide the trauma community with a validated and universally agreed upon definition of polytrauma.