
Preface

I keep time through a conglomeration of the media, the music industry, and film. My first exposure to trauma was through the nightly telecasts of the war in Viet Nam by the partnership of Chet Huntley and David Brinkley of NBC news. Walter Cronkite was a legend at the same time period and represented CBS. Both were responsible for the graphic images of the war; Night night after night, for years, I was mesmerized by the images of the wounded and dead. The film industry joined in, taking advantage of the politics of the war and the staggering number of the injured and dead to make *Apocalypse Now*, *Born on the fourth of July*, *Platoon*, *Good Morning Viet Nam*, and so on. Although these were just films, their closeness to reality put the trauma patients in my face. With the music and festival of Woodstock, I have never been able to turn back.

Trauma was again brought front and center as the seed of medical school was planted in my mind. Trauma was clearly a specialized field of medicine. Like many fields of medicine, there is little consensus on what to do with the trauma patient. In our recent history, other causes of trauma such as 9/11, Hurricane Katrina, the Haitian Earthquake, and the Tsunamis of Thailand and Japan have challenged trauma providers. Each one of these disasters presented trauma providers new sets of problems never seen before. The ongoing and complex conflicts in the Middle East (*The Hurt Locker*, *The Lone Survivor*, *Argo*, and *Zero Dark Thirty*) brought explosive devices, rocket-propelled grenades, and suicide bombers that created injuries we have never seen and challenged us to the highest level in terms of prevention and treatment.

Readers in professional fields look at textbooks seeking recipes to handle defined medical or legal problems. The initial intent of this book was to offer recipes to the anesthesiologist for each type of trauma. As all authors describe in this book, no two traumas are alike, most traumas include multiple sites that change the rules for one site. From a clinical research perspective, it is almost impossible to find a cohort of patients that match one another. Simply stated, a consensus of practice is offered in each chapter, but the scientific evidence may not be strong. The massive transfusion protocol in Dr. Dutton's chapter is well subscribed to by clinicians throughout the country with questionable evidence.

We break trauma down into anatomical parts and try to offer consensus. The book starts off with one of the most important topics: assessment of the

trauma patient. Dr. Wilson's systematic examination of the patient and gathering of data is the standard approach to the trauma patient (Advanced Trauma Life Support). Dr. Dutton's chapter on blood and blood products is in alignment with the recommendations of American Society of Anesthesiologists. That said, many trauma centers have not adopted these recommendations for complex reasons. My chapter offers a consensus on how to take care of the multitrauma patient. The evidence is strong but goes against the grain of an approach that dates back to the Civil War (Lincoln 2013). There will be many naysayers who will keep to the current paradigm they practice from. Simply stated, trauma providers may not buy into what is now new evidence.

At every national anesthesia meeting, exhibitors demonstrate the latest difficult airway device. Dr. Capan has an international reputation for airway management. This is an area of enormous research and development in devices that deal with the difficult and traumatized airway. It is conceivable that the conventional laryngoscope's life span can now be measured. Dr. Capan fills in any possible deficit in the understanding of the challenging airway in his chapter keeping in mind new ways to assess the bad airway with new devices.

It is difficult to separate the traumatized airway from cervical spine injuries. Dr. Abramowicz, a national expert on neuroanesthesia, links the two while Dr. Frost, a well-known name in the field of anesthesia and brain science, covers the brain and the spinal cord. It would be unusual if an airway trauma did not include the brain and the spinal cord. Dr. Frost offers the newest evidence on the brain, a subject that seems to be waxing and waning each year.

Dr. Wang wrote two crucial chapters on burns. Many level I trauma centers may not take care of severely burned patients. The criteria for a hospital to have a burn center are different from a level I trauma center. It is not unusual that trauma centers do not provide burn skills; I have read it several times to gain another skill that I am missing in my trauma repertoire. It is the largest topic as it makes up what is missing in the anesthesiologist's literature.

There are several chapters, which I call foundation chapters for clinicians, that describe the physiological changes in the body with severe trauma. Dr. Liu et al. have written a comprehensive piece on the physiological derangement of the trauma patient. In his chapter on trauma simulation, civilian trauma systems, Dr. Choi has presented the emerging world of simulation for the clinician so that critical advanced trauma life support steps are not missed during the assessment and initial treatment.

There are three patient populations that get special attention: the pediatric trauma (Dr. Fox), the pregnant (Dr. Fedson-Hack) trauma patient, and the complex geriatric patient, whose number increases (Dr. Alrayshi). In all the three chapters, we see a long stream of patients flowing into the trauma bay. The endless lineup of these three groups of patients makes these chapters a vital and wonderful welcome to this book.

The persistent Middle East wars have exposed anesthesiologists to blast injuries from suicide bombers, rocket-propelled grenades, and a wide array

of explosive devices. The medical corps of our armed services have outfitted our soldiers with Kevlar vests, and a medical pack that soldiers wear. Dr. Field's chapter on trauma on the military might be the most compelling in the book as new treatments for severe trauma to the arms and legs are discussed. Dr. Boldt's chapter on microvascular surgery on extremities and wound from war complement Dr. Field's work. These all tie in well with the 2013 Boston Marathon attack when two pressure cookers exploded and killed 3 and wounded over 260 civilians. These events resulted in multiple amputations and leg-sparing operations.

From terrorist blast injuries to motor vehicle accidents to bar fights, facial trauma is almost always involved. Dr. Clebone's comprehensive chapter on facial trauma breaks down a very complex topic into a systematic mode of making a comprehensive diagnosis and its invariable relationship to airway trauma. The chapter moves the anesthesiologist to securing the airway in manners not usually performed, which makes this chapter essential for all members of the trauma team.

Most of our penetrating trauma patients either are inebriated or test positive for an illicit substance like cocaine and heroin. Prescription pain killers, benzodiazepines and countless other possible substances. Dr. Bryson's chapter on substance abuse is enlightening as the initial assessment is masked by these substances. There is a strong link between trauma and this chapter is eye-opening to the clinician. The anesthesiologist must consider the patient as abusing substances until the toxicology screen comes back. Treating for withdrawal must also be considered. The chapter is the most comprehensive I have seen on the subject.

There is rarely a night that a national news station is not reporting on trauma whether from conflict or by accident. Dr. Kaye, a popular name in pain management, addresses pain in his superbly written chapter. There are recipes in his chapter that are evidence based and can be followed.

Dr. Roccaforte ties many of the themes of the book together with Civilian Trauma Systems, Disaster Management and Critical, How do we organize if another large-scale attack hits the United States. How are resources distributed and what is new in critical care for these patients?

The title of the book restates one of the oldest themes in medicine. New evidence asks the clinician to step away from concepts ingrained in their practice and change it. Often, change is made, and new evidence turns out to be false. The reader of this book is asked to step back and consider those clinical changes that may improve their practice. The more the clinicians change their practice, the more likely that the evidence has staying power.

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