

BOOK REVIEW

Madeleine J. Hinkes,¹ Ph.D.

Review of: *Skeletal Trauma: Identification of Injuries Resulting from Human Rights Abuse and Armed Conflict*

REFERENCE: Kimmerle EH, Baraybar JP. *Skeletal trauma: identification of injuries resulting from human rights abuse and armed conflict*. Boca Raton, FL: CRC Press, 2008, 493 pp.

The purpose of this book, according to the authors, is “to aid in the process of skeletal trauma identification in the context of large-scale human rights violations or armed conflict” (p. xiii). This is work that challenges all the skills of a forensic anthropologist or pathologist. The fact that these investigations are becoming all too necessary is a sad commentary on the human species.

The authors are assisted by 26 international contributors, predominately anthropologists, archaeologists, and medical doctors, but also a criminalist, a statistician, a police sergeant, and a mechanical engineer. The most recognizable name on the list is Clyde Snow, who pioneered the anthropological contribution to investigation of human rights violations in 1984. The contributors provide 16 case studies discussing incidents from Guatemala, Peru, Colombia, Panama, former Yugoslavia, Sri Lanka, and Cambodia.

Throughout the book, the emphasis is on “letting the dead tell their stories” (p. 14) and documenting the evidence for the true forensic purpose of courtroom presentation. The reader is exposed to significant aspects of International Humanitarian and Human Rights Law. These authors are clearly experienced in the field.

The first chapter lays out the authors’ investigative approach in reconstructing the circumstances surrounding the fatal incident. Their method of analysis is based on an epidemiological framework for trauma analysis, which leads to a differential diagnosis of the wounds and their mechanisms of injury and puts the traumatic event into a broader context. The framework comprises victim demography and vulnerability, wounded to killed ratio, context, fatal environment, intention of perpetrators, scientific protocols, methods for differential diagnosis, weaponry and ballistics science, estimation of cause of death, and manner of death. The wounded/killed ratio is an interesting technique to distinguish conventional warfare casualties from extrajudicial executions. It is presented here for use as a potential evidentiary tool.

The longest chapter is Chapter 2, written by Don Ortner. It is devoted to differential diagnosis of skeletal injuries, reconstruction techniques, and evaluating mechanisms of injury and timing (peri-

or postmortem). The next 6 chapters are each devoted to a single injury mechanism. Chapter 3 is blast injuries, differentiating gunshot wounds from blast injuries due to bombs, missiles, grenades, and shrapnel. The authors take a pathophysiological approach, looking at injury mechanisms, injury patterns, and skeletal wound characteristics.

Chapter 4 is blunt force trauma, examining the features of different bones, weapons, and type and degree of force. The authors demonstrate how to document the number of wounds, their sequence, and typical and atypical wounds. Featured is an interesting case study of freefall into a cave.

Chapter 5 details the skeletal evidence of torture. In keeping with the forensic focus, a legal definition of torture is presented, from the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. The authors discuss the importance of distinguishing between accidental injuries and those truly caused by torture. Much depends on the presence of healing and the context of injury. Analysis of the ribs can be crucial.

Chapter 6 looks at sharp force trauma (knives, hatchets, and machetes) and the variables for documenting it, such as the shape of the cut mark, cross-section profile, depth, walls and floor of the defect. The accompanying case report describes a Guatemalan sub-adult with 88 distinct wounds. Chapters 7 and 8 look at gunfire injuries: how to assess class of weapon, type of ammunition, distance, entrance and exit wounds, irregular or atypical defects, and variations in wounds by skeletal region. The very useful case study discusses gunfire basics.

The book is profusely illustrated, mostly with black and white photos and fluoroscope images. Many of the photos are evidence from International Criminal Tribunals. A few legends are confusing and some photos could use an arrow. The extensive bibliography covers 27 pages.

I am very favorably impressed with this book, and I highly recommend it. My copy is already marked up. But this book is not for beginners and not for the faint-hearted. It presents a sobering catalog of atrocities, torture, and death, which most of us do not see on a regular basis. However, the book is also very useful for the analysis of trauma in more typical medical examiner cases. It should find a place in the professional library of forensic anthropologists, pathologists, human rights investigators, and attorneys.