A 16-year-old victim of a brutal stabbing arrives to the E.R. at 2 A.M. The patient is panicked, tachycardic and hypotensive. As the general surgery registrar on call you examine the patient and find an entry wound on his right chest in the 7th intercostal space. The abdominal ultrasound scan suggests a laparotomy but the torrential pour of dark red blood through his chest drain pleads for a thoracotomy. Chest or abdomen? You ask the scrub nurse to prep both. Three bold strokes xiphisternum to pubis are made. The open abdomen exposes the source of bleeding. A massive liver laceration is hemorrhaging through a perforation in the diaphragm, filling the chest with blood. To keep this patient alive you will need to communicate with your team. Think strategically and use the right surgical tactics.

Top Knife: The Art and Craft of Trauma Surgery teaches you to think like a trauma surgeon by putting you in her blood soaked gumboots as she bulldozes through normal anatomy and discards damaged organs. The authors Hirshberg and Mattox are veterans of the trauma world, with the later being the inventor of the “Mattox Manoeuvre”. The book was written with the general surgery trainee in mind so mainly concerned itself with abdominal trauma. However, for the rural surgeon facing a thoracic or peripheral vascular injury the text offers “simple” fixes to keep the patient’s heart beating without a cardiothoracic surgeon.

Experienced trauma surgeons perform nephrectomies and distal pancreatectomies with an automaticity that frees their brain to focus on strategy and communication. Top Knife deals with the most cerebral element of trauma surgery: the debate between definitive repair and damage control. The text also gives advice on the mental aspects of surgery, such as how to maintain tactical flexibility, simplifying an operation, and avoiding flailing. Anyone who has inserted an I.V. line will have experienced flailing where you dumbly persist with the same technical approach despite repeated failure.

For the most serious branch of surgery this book treats its subject with a surprising creativity and sense of humor. Penetrating trauma to the head of the pancreas is described poetically as a “surgical soul wound”. Lee Harvey Oswald’s operative notes open the chapter on abdominal vascular trauma. Illustrations are used throughout the book despite the author’s admonition that “medical illustrators are optimists”. Nevertheless, the art supplements the description of complex anatomy and manoeuvres.

Top Knife is a 200 page medical thriller with valuable lessons for anyone interested in critical care, emergency medicine, and of course surgery. Sure, it will be a long time before you are performing Kocher manoeuvres or emergency room thoracotomies, but that knowledge is helpful now. To the uninitiated, trauma is seen as a frantic mess. However, with the knowledge gained from this book, readers come to realise that trauma surgery is organised chaos. Medical students can learn from trauma surgeons - we can all act more systematically, communicate better, and avoid flailing.