



UNION EUROPEENNE DES MEDECINS SPECIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS

**SECTION & BOARD OF SURGERY - TRAUMA SURGERY  
DIVISION**

**UEMS - Division of Trauma Surgery  
Curriculum for EBSQ Trauma Surgery Part 2  
Module: Polytrauma Management and Trauma Surgery of the Trunk**

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**Overview**

Competency in trauma surgery requires a thorough understanding of basic science, applied physiology, and the pathology of the injured patient. This includes proficiency in prehospital and emergency room management, as well as the management of injuries to the brain, trunk, musculoskeletal system, and soft tissues. Additionally, intensive care and rehabilitation for patients of all ages are essential components.

The knowledge and skills relevant to polytrauma management and trauma surgery of the trunk are outlined below.

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**Initial Assessment and Damage Control Management**

- Principles of prehospital trauma care
- Resuscitation manoeuvres, including manual chest compressions and defibrillation
- Surgical airway management and chest decompression
- Maintenance of circulation, including techniques of vascular access
- Cardiopulmonary and pharmacological resuscitation, including haemodynamic support
- Principles of blood transfusion and serology, including the use of plasma substitutes, protocols for massive transfusion, and associated risks and complications
- Management of closed and penetrating chest injuries
- Initial management of severe head and brain injury, spinal injury, paraplegia, tetraplegia, and space-occupying intracranial lesions
- Principles of damage control surgery
- Indications and techniques for resuscitative laparotomy and thoracotomy
- Patient triage, including major incident management and surgery in austere conditions



- Principles of ballistics and the management of gunshot, blast injuries, and burns
  - Principles of diagnostic imaging, including radiography, ultrasonography, computed tomography (CT), magnetic resonance imaging (MRI), angiography, embolization, and related techniques (e.g., REBOA)
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### **Perioperative Management**

- Interdisciplinary primary assessment and management of the severely injured in the prehospital and emergency room phases, including prioritization of diagnostic and therapeutic measures; acute life-saving interventions must be distinguished from subacute urgencies
- Assessment of fitness for anaesthesia and surgery, including evaluation of morbidity and mortality risks in the non-polytraumatized trauma patient
- Correction of coagulopathy and haemolytic disorders; prevention and treatment of thromboembolic disease
- Prevention and management of infections, particularly in cases of open fractures
- Understanding the principles of general, regional, and local anaesthesia
- Indications, techniques, and interpretation of ultrasonography, including FAST
- Indications and techniques of interventional radiology
- Management of closed and penetrating head injuries, including facial and orbital trauma
- Management of nerve and vascular injuries of the neck
- Management of blunt and penetrating injuries to the thorax and abdomen
- Classification of surgical wounds and principles of wound management, including infection control and treatment of chronic or complex wounds (e.g., negative pressure therapy)
- Management of vascular injuries to the limbs and principles of amputation
- Classification and management of burns
- Principles of skin grafting and use of flaps
- Management of trauma in pregnancy
- Techniques and principles of pain control
- Principles, indications, and selection of antibiotic therapy
- Postoperative monitoring and the prevention, recognition, and management of complications, with a focus on bleeding, wound healing disturbances, infection, and impaired blood supply
- Prevention, diagnosis, and treatment of abdominal compartment syndrome
- Principles and practice of intensive care medicine for the perioperative trauma patient



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- Understanding the pathophysiology of systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis, and septic shock
  - Principles of postoperative physiotherapy and patient mobilization
  - Principles of rehabilitation and social reintegration
  - Management of post-traumatic stress disorder (PTSD)
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**Professional Skills**

- Effective communication with patients, relatives, and colleagues
  - Ethics and medicolegal aspects of trauma surgery
  - Principles of informed consent
  - Psychological aspects of trauma care, including bereavement support
  - Clinical decision-making in trauma surgery
  - Leadership and coordination of a multidisciplinary trauma team
  - Quality control and improvement, including active participation in clinical audits, trauma networks, and critical incident reporting systems
  - Understanding research principles and the implementation of clinical trials and technical innovations
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**Mandatory courses (alternatives may apply as per eligibility criteria)**

- **ATLS® (Advanced Trauma Life Support)** course
- **DSTC® (Definitive Surgical Trauma Care)** course