Training for Vascular Damage Control
The NATO Perspective

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New York, November 17th 2016

Disclosure
Col Michael Engelhardt ............................................................

Q I have the following potential conflicts of interest to report:

Q Receipt of grants/research support
Q Receipt of honoraria and travel support
Q Participation in a company sponsored speakers’ bureau
Q Employment in industry
Q Shareholder in a healthcare company
Q Owner of a healthcare company

Q I do not have any potential conflict of interest

Department of Vascular Surgery, Military Hospital Ulm.

Number of cases logged for major vascular procedures


- 34%
Injury Type | Respondents (%)
--- | ---
Extremity vascular repairs | 46
Neurosurgery | 30
Orthopedics | 29
Abdominal vascular repairs | 28
Thoracic | 23
Burns | 22
Ocular trauma | 22
None | 22
Genitourinary or reproductive | 15
Pediatric surgery | 10
Critical care | 7
Gastrointestinal | 2

**Requested Additional Training Before First Deployment**

**A proposed skill set for the military surgeon**

**Military trauma training at civilian centers: A decade of advancements**

**Armed Services Consultant Appointment Board**

**Fellowship in Trauma**

**Deployment as Senior Trainee**

**General Surgeon**

**Military Operational Surgical Training Course**

**Danish Trauma Training Course**

**Advanced Trauma Life Support (ATLS)**

**Definitive Surgical Trauma Skills Course (DSTC)**

**Tyler JA, et al. J Trauma Acute Care Surg 2012; 73: S64**


**Willy C, et al. Langenbecks Arch Surg 2011; 396: 507**
Training Vascular Surgery

The French Advanced Course for Deployment Surgery (ACDS) called Cours Avancé de Chirurgie en Mission Extérieure (CACHIRMX): history of its development and future prospects

Table 1: Content of the five modules

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
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<tbody>
<tr>
<td>Module 1</td>
<td>Comprehensive overview of war wounds and the organisation of the WBM during foreign deployments (25 h), including 14 h of practical demonstration and training with the FST equipment</td>
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<td>Module 2</td>
<td>Management of limb and soft tissue injuries (24 h, including 12 h of practical sessions on cadavers)</td>
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<td>Module 3</td>
<td>Management of head, neck, cervical spine and thoracic injuries (24 h, including 8 h of practical sessions on cadavers)</td>
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<tr>
<td>Module 4</td>
<td>Management of abdominal and pelvic injuries (24 h including 8 h of practical sessions on cadavers), 48 h of lectures and practical</td>
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<tr>
<td>Module 5</td>
<td>Medical support to populations in austere environments, Management of major haemorrhage (25 h, including 8 h of practical sessions on cadavers)</td>
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Training Vascular Surgery

Training Vascular Surgery

Conclusions

With increasing surgical specialization military surgery faces considerable challenges.

Up to now there are no NATO-wide pre-deployment training for military surgeons.

Several different approaches ensure that future military surgeons are able to fulfill their role as deployed surgeons.

Consistently, all Medical Services seek a close cooperation with civilian partners.
Military Hospital Ulm