Postgraduate Course:

Skill training in intensive care medicine – Airway management, delirium management, coagulation management and CRM. A practical approach

Learning objectives:

This PG course concept comprises four topics
- airway management with hands-on training
- delirium management with practical simulation-based training
- coagulation management with point of care devices
- crisis resource management

This 1 day PG course covers important skills for everybody involved in the care for ICU patients in a practical-based approach

Course directors:
M. Sander, T. Schröder

Target audience:
Young intensivists and allied health care personnel

Venue:
PG Course will take place at Charité - Universitätsmedizin Berlin

Airway management
The incidence of difficult intubation in critically ill patients is significantly higher than in the OR. Therefore, intensivists should receive fundamental training in endotracheal intubation. It is important for physicians to have a check list or algorithm present which can be used if standard direct laryngoscopy fails. The course is divided in lectures and hands-on practice. Lectures focus on the current standards in the area of airway management, such as airway algorithm, new devices for endotracheal intubation and surgical airway. Hands-on stations include practice with different instruments (e.g. laryngeal mask, laryngeal tube, videolaryngoscopy) and skill stations to train the surgical airway access either in an elective or an emergency setting.

Module Airway - Difficult airway management

Learning objectives:
- Know the incidence of, and recognize a difficult airway (including morbidly obese patients and immobilized cervical spine)
- Know airway algorithms

Skill stations:
- Practice placement of supraglottic airway devices
- Practice intubation with airway trainer in hands: use standard and videolaryngoscopy with associated devices
- Practice percutaneous and surgical cricothyrotomy with airway simulator
- Practice airway algorithms
**Delirium management**

ICU delirium - Consequences for management of analgesia and sedation:

ICU delirium is a common and serious acute brain dysfunction with adverse outcome and high risk of mortality. The awareness of ICU delirium as a problem, which immediately requires therapeutic intervention, has been increased in the past years. The bundle of target-controlled and protocol-driven management of sedation, analgesia, and delirium and its monitoring included in this work offer the opportunity to improve the outcome of ICU patients based on the best evidence available to date. Moreover, the knowledge about precipitating and predisposing factors to prevent ICU delirium is essential and is represented in this course. The new 3rd Generation Guideline now includes evidence and consensus-based recommendations for the management of delirium in the intensive care unit. To ensure high detecting rates and best management, screening and scoring patients pain (BPS, BPS-NI, NRS-V), sedation (RASS) and delirium (Nu-DESK, CAM-ICU) will be trained in this PG course.

**Learning objectives:**
- Get awareness of delirium as a problem, which immediately requires therapeutic intervention

**Skill stations:**
- Learn to use a bundle of target-controlled and protocol-driven management protocols for sedation, analgesia, and delirium
- Learn in a hands-on setting screening and scoring of pain (BPS, BPS-NI, NRS-V), sedation (RASS) and delirium (Nu-DESK, CAM-ICU) - with patient simulation

**Coagulation management**

Coagulation disturbances are frequently seen in critically ill patients. These disturbances may be a consequence of underlying diseases or of intensive care therapies. Furthermore, they may be associated with bleeding complications, thromboembolic events, or may pose no threat at all.

Conventional, global coagulation assays are inexpensive and widely available, may be performed 24/7, but may be of limited use for some specific coagulation defects. Point-of-care coagulation assays may compensate for some limitations of global tests. However, some typical coagulation disorders may be missed by both global assays and point-of-care coagulation tests.

This PG course combines patients’ case presentations and hand-on-training on point-of-care coagulation monitoring devices if appropriate.

**Learning objectives:**
- Know the most common coagulation disturbances typically encountered at intensive care units
- Know about possibilities to diagnose and treat those coagulation disturbances

**Skill stations:**
- Learn to use several point-of-care coagulation devices

**Crisis resource management**

Originally defined in the airline industry as “Crew Resource Management”, Crisis Resource Management (CRM) in Healthcare promotes safety by addressing the behavioural and cognitive skills needed to effectively manage all available resources, especially during a crisis situation. This can be accomplished through the development of superior non-technical skills such communication, teamwork, situational awareness, and leadership. The training uses High-Fidelity Simulation as a platform on which to realistically train healthcare workers in a low-risk, interprofessional environment.

This training addresses a wide range of knowledge, skills, and attitudes including communications, situational awareness, problem solving, decision making, and teamwork; together with all the attendant sub-disciplines which each of these areas entails. CRM can be defined as a management system which makes optimum use of all available resources—equipment, procedures and people—to promote safety and enhance the efficiency of operations.
Learning objectives:
• Know the helpful procedures in critical situations
• Know communication pitfalls and misunderstandings

Skill stations:
• Practice communication in time critical situations
• Practice team work in critical incidents
• Practice decision making algorithms