

Teaching Pediatric Anesthesia for non Pediatric Anesthetists: A new Simulation Based Curriculum

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Introduction

In autumn 2008 a new Swiss Catalogue of Objectives for Anesthesia and Reanimation was introduced by the Swiss Society of Anesthesia and Reanimation. Beside a medical expert, a manager, a scholar and a professional, a team expert and communicator is one of the expert roles the specialist in anesthesia has to acquire. The innovation of the new postgraduate training program is the general inclusion of non technical skills and team behavior in the basic education of anesthesia residents.

A simulation based education course in pediatric anesthesia for non pediatric anesthetists

Regarding the pediatric part of the learning objectives for Anesthesia and Reanimation a new postgraduate two day course in pediatric anesthesia for non pediatric anesthetists is developed. Medical simulation forms the basic education tool in this course. Beside theoretical lectures including relevant pediatric knowledges about anatomy to airway management, physiology of respiration and circulation as well as aspects of pharmacology and common medications in children, a combination of low and high fidelity simulators are used teaching technical and non technical pediatric anesthesia skills. Bag mask ventilation, general pediatric airway management, pediatric and neonatal advanced life support, peripheral venous or intraosseous access are performed on low fidelity baby and junior mannequins. The anesthesia non-technical skills as communication, decision making, leadership performance, dynamic awareness and resource management are integrated in special scenarios on a high fidelity mannequin simulator. Main focus is set on the handling with different ages and the presence of carers in emergencies conditions.

Conclusion

Medical simulation is a promising method enhancing didactic teamwork training. Recent studies support significant correlation between team performance and patient morbidity in adults. The innovation of our two day course is integrating the education of team behaviors and attitudes in technical pediatric anesthesia skills and essential pediatric knowledges. The aim of the course is a comprehensive covering of the different core competencies a non pediatric anesthetist has to acquire in pediatric anesthesia education. Evaluation studies are planned to confirm the quality and further authorization of the course as a tool minimizing the gap between theoretical knowledge and clinical experience, enhancing the overall pediatric care competence and safety.

References

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