

Training in Emergency Surgery



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Training in Emergency Surgery

Although emergency surgery accounts for 50% of the surgery cases in hospitals in Italy, in 57% of the hospitals emergency surgery is not performed by a dedicated team. In Europe, numerous surveys have shown that 50% of the young surgeons desire a more complete training in emergency general surgery (EGS).

A survey conducted by the Association of Surgeons in training in the UK has shown that trainees want greater competence in EGS (92.4%) through the adoption of specific programs and training protocols.

The Italian Society of Emergency Surgery and Trauma (SICUT) has decided to try to make up for this lack of training by organizing specific courses that can serve as a training pathway in EGS.

KEY WORDS: Emergency Surgery, Training

"Sooner or later, it happens.

*You are a young attending surgeon
doing your first night on call at a busy trauma center
or a surgeon in a community hospital facing
a bad trauma case being alone and without backup.
Sooner or later, you find yourself
in the operating room with a massively bleeding patient
rapidly dying in your hands.*

(The Art & Craft of Trauma Surgery;
A. Hirshberg, K. L. Mattox)

Emergency general surgery accounts for 50% of all of a general surgeon's workload in our hospitals and 80% of all surgical mortality¹. It involves all types of hospitals, even though the case volumes are different.

Fifty-seven percent of Italian hospitals carry out emergency surgery procedures with a non-dedicated team,

with an average case load of 350 urgent surgical procedures per year². The lack of an independent unit of Emergency Surgery means no separation of elective and emergency cases which results in delays problems about the availability of operating rooms. The shortage of structures and trained personnel hinders correct and rational organization.

An online survey conducted in the UK to investigate consultants' experience with and attitudes towards emergency general surgery (EGS) showed that more than half (52%) of consultants who had been working for less than 5 years would have felt 'better prepared' for EGS with a dedicated period of EGS training, compared with 13% of those in working for more than 5 but less than 20 years. Nearly all trainees (92.4%) felt that more intensive training in emergency surgery would be beneficial to their general surgical training¹.

Does it make sense to consider the problem of the separation between emergency and elective surgery if in most hospitals emergency surgery includes the largest group of all surgical admissions?

Acute or elective surgery patients are fundamentally different and often require a very different approach, particularly with regard to examinations, decisions, optimization of clinical conditions and the choice of interventions. This emphasizes the need for appropriate training,

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which today can only be provided in a general surgery curriculum³.

In Europe, there are a number of different training models and the issues relating to operative exposure, training time and subspecialisation remain prevalent, but must be balanced with the acquisition of clinical competency with the main purpose of providing an emergency service with a well-defined level of quality.

There is currently no recognized surgical training programme in emergency general surgery, and consequently the competence in emergency surgery and trauma of those applying for emergency general surgery posts is largely unregulated.

It is unknown what the role of limited trauma training will be on outcomes but it is clear that training in this area could be improved. All emergency general surgeons should be aware of the principles of surgical trauma care, though not necessarily trained as trauma surgeons⁴.

Equal numbers of emergency and elective general surgical procedures are performed, yet in national health service institutions the priorities in surgical training are elective procedures.

How should the gap be bridged so that motivated, skilled surgeons of the future deliver a high standard of emergency surgical care? By addressing both training for the acquisition of necessary emergency general surgery skills, and the formation of job plans for trainee and consultant posts to meet the current and future requirements of the national health service.

In this setting the key considerations are:

1) how can competency be achieved and enthusiasm retained?

2) and who is responsible for ensuring that each clinician maintains the high standard of skills expected?

The thoughts of future surgeons in Europe about this topic can be illustrated by the letter that the Association of Surgeons in Training (ASIT) UK sent, in March 2017, to the Royal College of Surgeons, summarizing direct feedback and input from their members as well as their Shape of Training survey⁵.

The letter stated that it is imperative that EGS services are of the highest possible quality, to ensure optimum patient care. Key goals are to provide optimum patient care and satisfying consultant job plans. These are best achieved using a model of general and special interest surgeons, rather than moving towards replacing special interest surgeons with emergency general surgeons.

In a survey by Pearce et al only 8,2% of general surgical trainees, listed EGS as their career plan¹.

This outlines the trainees' desire to be "specialists" who also provide emergency general surgical care, rather than "generalists". It is essential that surgeons are trained to the highest standards. In addition, it is imperative that surgery remains an attractive career choice, with opportunities for career progression and job satisfaction to attract and retain the best candidates⁵.

The need for general and specialist surgeons to have knowledge about critical care is becoming more evident day by day.

In Italy and in the rest of Europe there is currently an absolute lack of appropriate training programs in emergency surgery.

"...the need for a formal Europe-wide speciality in emergency general surgery must be addressed. An interim solution might be the recognition of specific competence... This could be based on structured training" A. Leppäniemi, Br. J Surg, 2014

In order to partly respond to this demand we planned the Live Emergency Surgery Course (LESC), in collaboration with the School of Veterinary Medicine of the University of Camerino.

It is an "over two days" residential course, dedicated to surgeons in training, developed on an animal model (pig).

The aim of the course is the education and training of young surgeons in surgical techniques that they need for the clinical practice of emergency surgery.

The course provides lessons on theory, with the presentation of the materials and the devices that will be used; an interactive session dedicated to the illustration of clinical scenarios for surgical maneuvers; an "over the counter" surgery session on animal cadavers and laparoscopic simulator, followed by a session on live animals that includes emergency laparoscopic and open procedures. Since 2016, nine courses have been held which have trained more than 50 surgeons.

Although it cannot be considered exhaustive training in emergency surgery, it should nevertheless be considered a part of a training course, which can provide the theoretical and practical basis for a widespread quality response in surgical emergency management.

Riassunto

Benchè la chirurgia d'urgenza rappresenti il 50% dell'attività chirurgica degli ospedali, il 57% di essi in Italia non ha un team dedicato per la chirurgia d'urgenza.

In Europa numerose survey hanno mostrato che il 50% dei giovani chirurghi in attività avrebbe desiderato una formazione specifica più completa e più adeguatamente professionalizzante in EGS.

Una survey condotta dalla Associazione dei Chirurghi in formazione in UK ha dimostrato che la richiesta degli specializzandi è verso una maggiore competenza in EGS (92,4%) attraverso l'inserimento di programmi specifici nel percorso formativo.

La SICUT (Società Italiana di Chirurgia d'Urgenza e del Trauma) ha cercato di sopperire a tale carenza formativa con l'organizzazione di Corsi che possano rappresentare un percorso formativo costante in EGS.

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