



Letters to the Editor

Fresh Cadaver, an Old Surgical Model in Current General Surgery[☆]



Los cadáveres en fresco, un antiguo modelo quirúrgico en la cirugía general actual

Last September 9th, 2013, our surgery team at the Hospital Clínic conducted a course in the Dissection Room at the Medical School of the Universitat de Barcelona about the laparoscopic resolution of complex inguinal hernias. This course focused on the placement of prostheses using a standard technique as well as the totally extraperitoneal (TEP) laparoscopic approach. Fresh cadavers were used for the course, and the assessment of the participants was very positive, so much so that we have already offered other similar courses dealing with several aspects of surgery.

As surgeons, this was our first experience working with cadavers. Many years have passed since those anatomy classes from when we were students. We want to comment on our impressions, not necessarily of the hernia course, but of how the cadaver models surpassed our expectations, which was surprising.

First of all, I would like to begin by thanking the donors. It is necessary to acknowledge the individuals who donated their bodies to research, for many different reasons, but ultimately because they recognised their usefulness after death. Without donor programmes, we would have to explore different options to continue in the advancement of medicine and surgery, but there is nothing as exact as working with human cadavers.

As I mentioned before, our student years were long ago; we have grown, matured, learnt and acquired experience. It is always interesting to look back and once again do things we had forgotten, but what was surprising was the sensation, which was completely different from when we were students. As surgical professionals, we have clear objectives, and that changes the perception of the stimuli.

As we are accustomed to different inert and experimental surgical models (mainly animals), what was striking was the near perfection of the models for surgical procedures. This

similarity to a real situation makes fresh cadavers the best model to advance in the implementation of surgical techniques by shortening the learning curve of standardised procedures.

The key to the continuation of this model programme is infrastructure, which is costly and involves many resources and employees. Nonetheless, we believe that the end result is worth it. In our course, several surgeons from various hospitals were exposed to the management of a procedure that was approached in different manners, thus acquiring technical skills that would otherwise have been learnt directly in clinical practice. In addition, they performed laparoscopic inguinal hernia repairs, which would have also been learnt in real clinical cases or that, probably, would never have been done, and the advantages of technological advances would never be offered to part of their patients. Although the model used is always a model and, therefore, does have certain limitations, we believe that the use of cadavers is recommended, whenever feasible.

Teaching a course is always complex, but this course in question has been especially demanding. We could say that the model worked and that the usefulness of the course surpassed everyone's expectations. The follow-up surveys completed by the course participants revealed that most have incorporated what they learned with us into their daily clinical practice.¹ Mission accomplished.

Moreover, when we contemplated organising these courses, it was our obligation to take advantage of the possibility to work with human bodies. We complemented the courses with practical experience for our residents. The residents participated in the courses and, once the procedures were completed by the course participants, residents had the opportunity to do surgical interventions that were new to many of them. These included laparoscopic cholecystectomies, appendectomies,

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intracorporeal sutures, etc.¹ This experience was also considered positive by the young surgeons. We believe that continuing with this activity could shorten the individual learning curve for each professional² and avoid complications due to lack of experience.³ We believe that this second objective is as important as, or even more so than, the course itself and can boost surgical training in our country. In fact, there are those who support the evaluation of acquired skills. For these evaluations, virtual models as well as cadavers have been proposed, although human bodies are clearly superior.⁴ This assessment should be essential before initiating actual operations on patients.⁵

In summary, I would like to encourage surgical teams and universities in Spain to do all they can to be able to work with cadavers, not only for training in technical advances but also for initiating young surgeons in standard techniques. The benefits far outweigh the organisational difficulties, so this possibility should no longer be underutilised.⁶

To finish, I would once again like to thank the donors in acknowledgement of their selfless actions.

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Is Pneumomediastinum and Cervical Emphysema a Sign of Poor Prognosis in Colorectal Anastomosis Leakage? ☆



¿Es el neumomediastino y enfisema cervical un signo de mal pronóstico en la dehiscencia de anastomosis colorrectal?

Dear Editor,

We have read with interest the article by Dr. de la Plaza Llamas et al.¹ about pneumomediastinum and cervical emphysema as initial signs in colorectal anastomotic dehiscence. Recently, we had the opportunity to treat a similar case, and its exceptional nature has made us inclined to share our experience and to comment on some details of the case in question.

The patient is an 85-year-old male who was being studied for iron-deficiency anaemia and was diagnosed with sigmoid

adenocarcinoma. Thoracoabdominal CT scan showed no evidence of metastatic disease, with a reported radiological stage of T₂N₀M₀. He was treated by a laparoscopic approach, involving sigmoidectomy with mechanical end-to-end colorectal anastomosis. The patient progressed favourably but presented marked supraclavicular cervical emphysema on the 4th day post-op, which extended to the upper extremities, thorax and abdomen, with no associated symptoms of abdominal pain. Thoracoabdominal CT scan demonstrated important pneumomediastinum and cervical emphysema (Fig. 1A and B), moderate abdominal pneumoperitoneum in the supramesocolic compartment (Fig. 1C), 2 minimal bubbles

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