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Editorial

The Urgent Surgery Units: An Imperative Change With Benefits for Everyone![☆,☆☆]

Las unidades de cirugía de urgencia: ¡un cambio imperativo con beneficios para todos!

The development and maturation of healthcare systems specifically dedicated to the management of surgical emergencies arises as a response to the public need to provide optimal care for patients requiring emergency surgery (ES). Over the last 15 years, this discipline has rapidly evolved thanks to the dedication and vision of trauma surgeons who inspired classic concepts inherent to the regionalization of trauma management for the implementation of ES treatment systems. This phenomenon has had global success and has led to the development of similar examples in different parts of the world.

The article published in this issue of Cirugía Española by Aranda-Narváez et al., ''The Acute Care Surgery model in the world, and the need for and implementation of trauma and emergency surgery units in Spain'', is an extensive and magnificently written review that establishes basic concepts and provides worldwide evidence about the value and the need to create such units for the optimal management of trauma patients and surgical emergencies. The authors call for the expansion of these models to all the autonomous communities of Spain and, in turn, describe the possible challenges for such implementation in our country. They also share the experience in Andalusia, where 5 of the 7 ES centers in Spain are currently located.

In this article, an overview and the evolution of the concept of Acute Care Surgery (ACS) in the United States is presented clearly and concisely, while describing the essential role of scientific and professional societies as leaders in this process. The benefits resulting from the implementation of the model are described, as are additional positive effects that go beyond the comprehensive care of surgical patients.

The authors provide evidence demonstrating that quality and medical treatment indicators that directly reflect patient care improved significantly in the studies conducted with this model. Decision-making times and hospitalization in the ER were reduced, improving the use of beds. Morbidity, mortality and hospital stay likewise improved. Thanks to the priorities proposed by the World Society of Emergency Surgery, treatment patterns and priority levels have been created to facilitate the use of operating rooms and distribution between day and night shifts.[1]

The emergency procedures are executed according to the degree of severity and acuteness of the surgical emergency. A Cochrane review has also proposed improvements in secondary outcomes, including the reduction in canceled surgeries, higher patient satisfaction levels, greater educational opportunities for residents, and decreased work overload for both surgeons and auxiliary personnel.[2]

In short, the establishment of these ES units and the systematization or consolidation of these services have shown their effectiveness at many levels, including economic benefits, improvements in workflow, positive impact on colleagues with high-volume elective surgery practices, medical education and the creation of research groups, which have been able to promote scientific productivity and the institution of quality control protocols and algorithms (pathways) in conditions such as acute cholecystitis, appendicitis, diverticulitis, intestinal obstruction, etc.

The broad scope of the discipline of ES has made this activity one of the most coveted surgical subspecialties in the United States. The number of ACS fellowship programs in North America has grown, and the quality and academic

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background of the candidates applying for this specialty make it increasingly competitive. Young surgeons looking to broaden their professional and academic opportunities bring to the table aspects as varied as global surgery and international cooperation, outcomes research, implementation sciences and cost-effectiveness strategies as research methods that could be utilized and developed to increase knowledge in a variety of emergency diseases. Surgical residents or recently graduated surgeons who have completed additional training in public healthcare, administration, management, and healthcare policy also compete each year for acceptance to ACS training programs. In other words, there is great potential and human wealth in these young surgeons who currently seek to dedicate themselves to this new branch of surgery. Thanks to this enthusiasm, I dare predict that, in the not-too-distant future, important advances and innovative contributions will be made as a result of the exponential growth in many areas of emergency surgery.

A select group of clinical researchers will emerge who will study multiple emergency diseases, as well as a wide range of new knowledge in areas such as the early management of intra-abdominal sepsis, necrotizing infections, acute management of surgical complications of pathologies such as pancreatitis and bleeding of the digestive tract. Advanced strategies in the use of laparoscopy in emergency situations for interventions for diseases of the stomach, colon, gallbladder, etc., that require immediate attention will be studied and published. Complex intestinal surgery, the use of open abdomen as a method to control a septic focus, the management of fistulae and effective strategies for rescue surgery, which is nothing more than the standardized management of more serious surgical complications, such as anastomotic failure and acute abdominal wall failure, as well as interventions in elderly patients, will be part of the reference manual for this surgical practice. It is not the intention of the ACS surgeon to infiltrate the territory of other subspecialties; much to the contrary, it is an effort to consolidate services in order to provide continuous, comprehensive, multidisciplinary care with an organized and systematized approach in order to improve survival in critically ill patients.

The extensive analysis of the literature provided by the authors also allows us to define the interventions associated with these benefits. Obviously, these interventions vary according to local realities and working conditions in different regions and countries. Each region will be affected differently according to the volume of patients and the proportion of trauma patients versus non-trauma emergencies. Other factors, such as the presence of a high-volume referral center and the number of regional hospitals, will also require specific solutions. Triage and patient-transfer programs will be necessary to channel those with specific needs to specialized medical centers that are better equipped to respond to such needs; thus, optimized regionalization will be an added consequence inherent to the creation of the system, as has already been demonstrated in the ACS models in England.[3]

Aside from these factors, the study by Aranda-Narváez et al. should be used as a guide to expand this process to the other autonomous communities of Spain. The experience in Andalusia sets a precedent that should be emulated and adapted to the different regions of the peninsula. The logistical and administrative considerations and bureaucratic measures that will be needed to take full advantage of these initiatives already proven in so many other places represent challenges and, at the same time, opportunities for the implementation of the model. The AEC, thanks to its commitment through the ES committee, has evolved rapidly and at this time constitutes a high-value resource to bring about the necessary changes in the different regions of our country.

REFERENCES

1. Kluger Y, Ben-Ishay O, Sartelli M, Ansaloni L, Abbas AE, Agresta F, et al. World society of emergency surgery study group initiative on Timing of Acute Care Surgery classification (TACS). World J Emerg Surg. 2013;8:17.
2. Kreindler S, Beaudin P, Sadeh E, Nason R, Hochman D, Raynard M, et al. The effect of consolidating acute-care surgery on patient, staff, and resource outcomes. Cochrane Database Syst Rev. 2011;11. http://dx.doi.org/10.1002/14651858.CD009450. CD009450.
3. NELA Project Team. The first patient report of the National Emergency Laparotomy Audit. London: RCoA; 2015.

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