

ATLS®



celebrates 25th anniversary

BY PAUL E. COLLICOTT, MD, FACS, CHICAGO, IL

Since its introduction 25 years ago, the Advanced Trauma Life Support® (ATLS®) program has been the most successful educational course that the American College of Surgeons offers, and it has served as the international standard for the initial evaluation and management of the trauma patient.

History

At the invitation of C.T. Thompson, MD, FACS, then-Chair of the ACS Committee on Trauma (ACSCOT), I agreed to introduce the concept to the committee at their 1979 annual meeting in Houston, TX. The ACSCOT enthusiastically endorsed the concept and called upon its Region Chiefs to meet in Lincoln, NE, for an introduction to the course.

It was a cold, snowy January in 1980 that the College initiated the promulgation of ATLS as an

educational program to teach physicians about the initial care of the injured patient (See Figure 1, page 19).

This course was not the first one ever presented. The true pilot course was given to a group of family physicians in the small southeastern Nebraska town of Auburn in 1978. This course was presented at the request of several Lincoln, NE, physicians and nurses following the 1976 crash of a private airplane piloted by J.K. Styner, MD. Dr. Styner's wife was killed and his children were injured in the tragedy. This incident, which also occurred in southeast Nebraska, was the catalyst for developing the course we know today as ATLS.

It was a quirk of fate and a set of unusual circumstances that caused Lincoln to be the test site for ATLS. The community had previously established an area health educational consortium called the Lincoln Medical Education Foun-



Figure 1: The first ACS ATLS course, January 1980.

dation, which worked closely with Stephen Carveth, MD, FACS, a few years earlier to formulate an emergency dysrhythmia recognition course for the treatment of cardiac patients. This course eventually became known as the Advanced Cardiac Life Support (ACLS) program now associated with the American Heart Association, and set the precedent for several of the important educational concepts that would be applied in ATLS, such as instilling both cognitive and manipulative skills.

Some people involved in the development of ACLS were eager to work out a similar approach for treating the trauma patient. These individuals included a cadre of nurses, physicians, and educators and created a course that was presented to the surgical and family practice residents in the community. News of the course spread, and the University of Nebraska College

of Medicine, through Brent E. Krantz, MD, FACS, and the ACS Nebraska Committee on Trauma, through Joel T. Johnson, MD, FACS, became involved. Because all of the people and institutions involved were striving to improve the care of the injured patient, no one claimed “ownership” of the project, and, as a result, the course was further refined.

Expansion

Initially, everyone involved believed that this would be a “Nebraska course.” However, the then Immediate Past-Chair of ACSCOT, R. W. Gillespie, MD, FACS, and the president of the American College of Emergency Physicians, Harris Graves, MD, FACEP, were both Nebraskans and convinced the group to think more broadly. Another course was then presented to representatives of both groups and the then



Figure 2: The first ATLS course outside the American continents, at the Royal College of Surgeons of England, London, 1988.



Figure 3: ATLS staff at the Royal Australasian College of Surgeons in Melbourne, Australia, 1988.

ACSCOT chair suggested that because trauma is a surgical disease, this course should be run under the auspices of the College. This decision was a bold departure from ACS tradition because, in the past, its educational programs had been intended exclusively for surgeons.

In 1980, the promulgation of ATLS in the U.S. began with regional courses in Denver, CO, Dallas, TX, San Diego, CA, Washington, DC, Philadelphia, PA, Newark, NJ, Opelika, AL, and Milwaukee, WI. An administrative plan was developed and additional courses in the U.S. ACSCOT regions occurred.

Canada introduced ATLS in 1981, with courses in Toronto and Vancouver and subsequent promulgation. By this time, a committee within the ACSCOT was formed and charged with oversight, refinement, and further advancement of the course. In the span of two years, ATLS rapidly was accepted and became the standard of the initial evaluation and management of the trauma patient in the U.S. and Canada. For the next six years, ACSCOT members made a concerted effort to ensure the course's availability to all physicians who participated in the care of the injured patient. ATLS gave meaning and purpose to the regional and state structure of the ACSCOT.

In 1986, ATLS was introduced to the international community, primarily in Latin America. The first course outside of the American continents was presented at the

Royal College of Surgeons of England in London (see Figure 2, page 20).

The Royal Australasian College of Surgeons in Melbourne hosted an ATLS course two weeks later (See Figure 3, page 20).

Between 1986 and 1992, a total of 13 countries, including Israel, Ireland, Singapore, Saudi Arabia, and South Africa introduced ATLS. The course is now taught in 43 countries; 25,637 courses have been conducted in which 600,000 physicians, 7,500 physician extenders, and 24,000 auditors have been trained.

Ongoing refinement

Since the introduction of the course, the manual has been revised on multiple occasions with the seventh edition introduced this year to celebrate the 25th anniversary. Today the manual's content is based on input from all countries that teach the program. The manual has been translated into several different languages, and the testing methodologies have been standardized. All additions and deletions to the manual must be evidence-based. Representatives of each country teaching the ATLS principles meet annually at the Clinical Congress to share ideas and experiences. Indeed, ATLS has become the international standard for the initial evaluation and management of the trauma patient with multiple injuries.


Several ancillary "educational products" have been produced in conjunction with ATLS: Trauma Evaluation and Management for medical students; Pre-Hospital Advanced Trauma Life Support; the Advanced Trauma Course for Nurses; and several other courses using the precepts of ATLS. The number of "copycat" courses today points to the success of ATLS.

The course continues with almost an exclusive student/teacher interaction approach to the learning process and the digitization of the slides and roentgenograms. Students and instructors must refresh every four years and physicians working in ACS-verified trauma centers must be ATLS qualified.

Commitment

The resounding success of ATLS cannot be ascribed to one person or organization but, rather, to the unrelenting commitment of those indi-

viduals who care for the injured patient. The single identifiable link in this entire process is Ms. Irvine K. Hughes, RN, the coordinator and administrator of the program.

The ACS thanks the entire volunteer faculty for their unceasing dedication to this program. Countless lives have been and will continue to be saved because of the ATLS principles and the dedicated individuals who develop them. 

Bibliography

- Carveth SW, Burnap TK, Bechtel J, et al: Training in advanced cardiac life support. *J Am Med Assoc*, 235:2311, 1979.
- Collicott PE: Advanced Trauma Life Support course: An improvement in rural trauma care. *Nebraska Med J*, 64:279, 1979.
- Collicott PE: Advanced Trauma Life Support (ATLS): Past, Present, Future. 16th Stone Lecture, American Trauma Society. *J Trauma*, 33:479, 1992.
- Collicott PE, Hughes IK: Training in advanced life support. *J Am Med Assoc*, 243:1156, 1980.
- Committee on Trauma, American College of Surgeons: *Advanced Trauma Life Support for Doctors, Student Course Manual*. Chicago, IL: American College of Surgeons, 2004.
- Hughes IK: The Advanced Trauma Life Support Course: From prospect to reality. *Bull Am Coll Surg*, 69(10):40, 1984.

Dr. Collicott is Director of the ACS Division of Member Services and one of the founders of ATLS.

