

Can You Make the Diagnosis? Case Study Examines Management of Perforation



**Art Proust,
MD, FACEP**

You are called to the scene for an 18-year-old male who is complaining of rectal bleeding. He is the only patient and the scene is safe. He has not been in any altercation and you do not detect the odor

of fermenting alcohol on his breath. When asked how much bleeding, he responds he is having "drops of blood." A quick set of vital signs are: pulse, 71; respiratory rate, 18; and BP, 137/80.

Your suspicion is raised as you feel your patient is not forthcoming with the actual events of the incident. Further questioning reveals that he had placed a drum stick in his rectum approximately 6-8 inches to heighten his sexual arousal with his girlfriend, and felt a "pop" with subsequent rectal pain and bleeding. The Rapid Trauma Survey during the ITLS Primary Survey is unremarkable. What is your diagnosis?

If you are thinking rectal perforation, you are correct. His exam in the emergency department is unchanged from his prehospital assessment. The rectal exam reveals bloody secretions without evidence of any tears. His sphincter tone is intact. The concern for perforation is heightened with the knowledge that the drum stick had been inserted 6-8 inches, which would be at the rectosigmoid junction. The work-up includes a CT scan of his abdomen and pelvis with oral contrast, which takes 5 hours for the contrast to be absorbed at the level of the rectosigmoid colon and rectum. Figure 1 shows a sagittal reconstruction of his CT scan with the red arrows depicting some of the pockets of intraperitoneal free air.

During his ER course, he subsequently developed peritoneal signs. IV antibiotics were initiated and he went to the operating room for exploratory laparotomy and repair of the perforation. The patient was fortunate in that he did not require a colostomy and that primary repair could be performed. The remainder of his hospital stay was uneventful.

Perforation of the rectum or colon is the most frequent and serious complication of rectal foreign bodies. Often, free air under the diaphragm will be seen if the colon is perforated. These patients will present with rectal bleeding and pain. Later signs include



Figure 1: CT scan of abdomen and pelvis



Figure 2: A retained foreign body

abdominal pain, fever and peritonitis. Treatment for retained foreign bodies (Figure 2) includes sedation and local anesthesia to overcome the "vacuum effect" created within the rectum from the retained foreign body. Rectal and colonic perforations are treated with primary surgical repair and possible colostomy.

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First ITLS Illinois Provider Bridge Courses a Success

The first two Provider Bridge Courses have been held at Peoria Area EMS on April 28 and May 30. The pilot program to transition experienced PHTLS providers to ITLS was approved by the Board of Directors for ITLS Illinois to hold courses in 2009.

The two courses successfully bridged 27 Advanced and 3 Basic providers and were met with positive feedback from both participants and faculty members.

Students' evaluations noted that they enjoyed learning some of the new technology, including capnography, and appreciated the practice of patient assessment and other skills stations. "The assessment skills we were able to learn and practice will benefit all," one student noted.

All students from the April 28 course stated they would attend an ITLS course for recertification in 3 years based upon their experience at the bridge course.

The April 28 course was taught by Chapter Medical Director Art Proust, MD, FACEP, Les Heffner, NREMT-P, Ed Spa, EMT-P, and Randy Stroud, EMT-P with assistance from Peoria Area EMS instructors, who taught the second course on May 30.

The Provider Bridge program was proposed by ITLS Illinois to meet the needs of EMS systems that want to transition all of their providers from PHTLS to ITLS. Advisory Committee members Les Heffner, NREMT-P, and Greg Love, NREMT-P, developed the course.

ITLS Illinois will report back to the Editorial Board at the end of 2009 regarding the success of the pilot program. The Editorial Board and Board of Directors will review the program for a final time to determine if it is approved for organization-wide rollout.

Interested in holding this course in your region? Please contact Sue McDonough at 630-495-6400, ext. 201, or suem@icep.org.

ITLS Training Reintroduced in Peoria Area

The Peoria Area EMS system (PAEMS) has reintroduced ITLS training in 2009, certifying and bridging providers and instructors in the region.

PAEMS has already coordinated 5 provider courses and 3 instructor courses since February 2009, with 3 more provider courses scheduled for fall. To date, 66 providers and 19 instructors have been ITLS-certified.

Under the direction of Dave Klings, RN, EMT-P, PAEMS System Manager, Cheryl Colbenson, DO, PAEMS EMS Medical Director, and George Hevesy, MD, FACEP, Emergency Department Director at OSF St. Francis Medical Center in Peoria, the program intends to bridge approximately 280 intermediate and paramedic students from PHTLS to ITLS over the next three to four years as their recertification comes due. PAEMS is helping to pilot the Provider Bridge Course and organizing provider courses to accomplish this goal.

Updated Pediatric Course Rolled Out in Illinois

One of the first 3rd edition ITLS Pediatric Provider Courses was held June 20 as a post-conference at ICEP's RESPONSE+2009 EMS conference. The course was taught by David Maatman, NREMT-P/IC and ITLS Illinois Affiliate Faculty members Tony Cellitti, NREMT-P and Scot Allen, EMT-P. Twelve students were certified.



LEFT: ITLS Pediatric students practice assessment skills on a pediatric mannequin. RIGHT: Instructor Tony Cellitti, NREMT-P, demonstrates capnography technology on a mannequin for students.



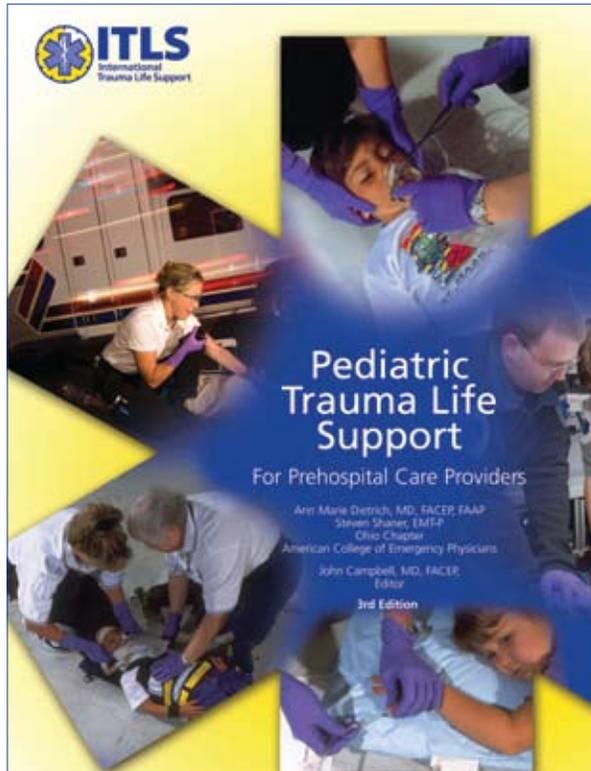
New 3rd Edition *Pediatric Trauma Life Support* Manual Makes Its Debut

The 3rd edition of *Pediatric Trauma Life Support for Prehospital Care Providers*, the ITLS Pediatric provider course manual, is in stock and now available.

The book was released in June and can be purchased for \$38 per book.

Instructor materials, including an instructor guide and instructional PowerPoint slides to be used when teaching the course, are being developed and will be available in August. Prices for the supplemental materials have not yet been set.

Pediatric Trauma Life Support is a companion to the 6th edition *ITLS for Prehospital Care Providers* manual and reflects the same ITLS method of assessment and management, but with an emphasis on the unique needs of the pediatric trauma patient. In addition, the text highlights techniques for communicating with young patients and their parents.



The 3rd edition of the ITLS Pediatric provider course manual, *Pediatric Trauma Life Support for Prehospital Care Providers*, was released in June.

chapters have been revised and references updated, as have many photographs, charts, and illustrations. The text has also been revised to conform to the most recent American Heart Association guidelines for artificial ventilation and CPR.

The text has been authored and revised under the leadership of editor Ann Dietrich, MD, FACEP, FAAP, and the Ohio Chapter of the American College of Emergency Physicians.

As introduced in the 6th edition ITLS provider manual, the text's "Pearls" feature has been repositioned so that it consistently appears in the margins beside relevant text. For the first time, the Pediatric manual will feature full-color photographs and illustrations for the most useful, in-depth visual review of the material.

The 3rd edition has been updated to reflect the latest and most effective approaches to the care of the pediatric trauma patient. All

To place an order today, visit the ITLS Illinois Bookstore online or call ICEP at 630-495-6400 or 888-495-4237, ext. 213.

Five Additional ITLS Provider Courses for Rural EMS Providers Scheduled for 2009

ITLS Illinois has scheduled five additional Provider Courses for Rural EMS Providers through the fall of 2009 due to the popularity of the courses. Fifteen courses have already been held in 2008 and 2009.

The courses are available at no cost to EMS providers who live or work in rural Illinois as part of a grant from the Illinois Department of Public Health. The courses are co-

ordinated by Scot Allen, EMT-P/FFIII, ICEP's EMS Manager, and held throughout the state. Chapter Medical Director Art Proust, MD, FACEP serves as the Course Medical Director.

Full course details and registration for the five upcoming courses are available online at www.itraumaIL.org. Registration includes a 6th edition provider manual.

UPCOMING COURSES

August 1-2: Wayne City, IL
August 29-30: Riverton, IL
September 5-6: Dixon, IL
September 26-27: DeKalb, IL
October 17-18: McLean County EMS, Bloomington, IL

Upcoming ITLS Illinois Advisory Committee Meetings

Mark your calendar for 2009! All meetings will be held from 10:00 AM to 12:00 PM.

Wednesday, September 2

ICEP Office, Downers Grove
(teleconferencing available)

Wednesday, December 2

ICEP Office, Downers Grove
(teleconferencing available)

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Plan Now for 2009 International Trauma Conference in Charlotte, North Carolina

Save the date for the 2009 International Trauma Conference, scheduled for November 4-7, 2009 in Charlotte, North Carolina!

The two-day conference will be held Friday, November 6 and Saturday, November 7. Pre-conference workshops will be held on November 4 and 5.

The 2009 conference will feature nationally recognized speakers that include:

- Ray Fowler, MD, FACEP, reviewing the history and predicting the future of EMS
- Todd Hoffman, dismantling the scene of an accident detail by nitty-gritty detail
- Howard Werman, MD, FACEP, examining the challenges of geriatric trauma
- William Bozeman, MD, FACEP, FAAEM, illustrating tactical medicine and combat casualty care from the front lines

A conference brochure with more details and a full schedule of speakers will be mailed at the beginning of July. Registration will also open in July.

The lakefront conference hotel, the Hilton Charlotte

University Place, is within minutes of popular North Carolina attractions. A special rate of \$125 per night plus all applicable taxes has been arranged for conference participants and exhibitors. Use Group/Convention Code ITLS when making your reservation or use the direct link from www.itrauma.org/



conference. The cut-off date for this rate is October 11, 2009.

ITLS Illinois encourages Illinois providers and instructors to plan now to attend what may be the biggest ITLS trauma conference yet! See you in Charlotte in November.