COURSE REVIEW

Pre-Hospital Trauma Life Support (PHTLS) Advanced Provider Course Article 990110

Jason C Bendall and Brian Parsell

BACKGROUND

“PHTLS is a unique two day multidisciplinary continuing education program designed to enhance and increase knowledge and skill in delivering critical care in frontline pre hospital trauma care and the handling of trauma patients.” [1]

PHTLS is conducted in Australia by PHTLS Australia, Queensland Health on behalf of the Queensland Government. Queensland Health introduced the PHTLS program with the endorsement of the Royal Australasian College of Surgeons in 1997 as part of its commitment to improving the health of people living in rural and remote Queensland. [1] The Course was developed by the Prehospital Trauma Life Support Committee of the National Association of Emergency Medical Technicians (NAEMT) in Cooperation with The Committee of Trauma of The American College of Surgeons, who publish the well know text – PHTLS – Basic and Advanced Trauma Life Support, now in its 5th Edition. [2] The development of the PHTLS began in 1981 following the introduction of Advanced Trauma Life Support (ATLS) program for medical practitioners [2] but obviously, with a pre-hospital emphasis. PHTLS courses have continued to proliferate across the United States and are also conducted internationally in over 25 countries. [2]

COURSE TEXT

The course text is the 5th Edition of PHTLS [2] which, even in isolation is a useful reference text and is quite interesting and easy to read. Whilst there is little in text referencing, a reference list is included at the end of each chapter. Diagrams are in colour and add nicely to the text. Learning outcomes are clearly defined and there is a summary, scenario and review questions for each chapter. There are also specific skill sections included for certain chapters such as Airway Management and Ventilation, Thoracic Trauma, and Spinal Trauma.

COURSE PROPER

The course commences with a written exam and baseline determinations for skills. The written exam was multiple-choice and performance was based largely on prior knowledge and/or preparation by reading the text prior to attending (which is encouraged). The baseline skill determination was a simulated incident, performed by a newly formed group that (in most instances if not all) functioned poorly together based on a range of factors including group issues, leadership issues and personal issues rather than necessarily poor skills.

The course proper comprised of summarised lectures (from the text) and discussions delivered by a range of instructors, including [during the course we attended] a Medical Director, Registered Nurse, Ambulance Paramedic, Fire Fighter and lay person (first responder). To become an instructor, candidates attend a PHTLS

Instructors Course following successful completion of the PHTLS Course. Additionally, there are practical skill stations encompassing a range of skills. The skill work is performed in groups comprised of a range of disciplines and experience.

Towards the end of Day 2, there is another written exam and final practical skill station assessments. All members of the team are required to act as a team leader irrespective of their background. Compared to the baseline determination, all groups appeared to have improved.

Course participants receive a Statement of Attendance and Certification from the US NAEMT.

SUMMARY

Overall, the course is a good product, delivering mostly useful information in a relaxed but educationally sound manner. The course is however rigid and there is only one way, the PHTLS way, especially when it comes to spinal immobilisation and on scene interventions. At present, few Australian pre-hospital providers go to the extremes of immobilising the cervical spine as is the case in the US and this (personally) became a little frustrating.

The course is probably most suitable and valuable for team members in rural and remote areas where there are limited resources and exposure and in as much, a system such as PHTLS principles is likely to deliver reasonable quality care. Other groups to which the course would be valuable include predominantly in-hospital care providers (including Doctors and Nurses) who may have limited experience in the out-of-hospital setting, as the course provides rapid acquisition of knowledge and skills in a compact and efficient format.

In terms of practising Ambulance Paramedics and Intensive Care Paramedics, what you get out of the course will vary depending on your background and experience. Junior staff would find the course valuable. More senior staff however may or may not find the course valuable and/or enjoyable. Nevertheless, irrespective of your knowledge, experience and training, it is important to reflect on your own practice from time to time, and this course provides the opportunity to do this. There is certainly valuable content in the course and ample opportunity to consolidate skills (even if performed differently to what you are used to).

There was an emphasis on principles (covered nicely in Chapter 15) [2] namely: scene assessment; primary survey (and cervical spine immobilisation) with a "treat as you go" philosophy [of note: - the PASG is still included with limited indications]; recognising time critical incidents (life threatening or multi-system injuries); minimising scene time (the Platinum 10 minutes of the Golden Hour) including "limited scene intervention" [of note: – cannulation was not generally considered part of the limited scene intervention]; initiation of rapid transport to "closest appropriate facility". Interestingly, iv access, iv fluids, secondary survey and medical history were all indicated only after initiation of rapid transport.

Whilst we agree in principle with not wasting time on scene, that we, like many of our pre-hospital colleagues believe, iv access can and should be established in an opportunistic fashion where possible, and that this (in most circumstances) will not "waste time" and can be achieved (concurrently with other priorities, depending on resources) in the Platinum 10 minutes. The ability to establish two large bore cannulas enroute as the text suggests, adds (in our opinion), increased difficulty, decreased safety and a potentially more compromised patient. Obviously, if the patient is ready to be transported and iv access has not been established, then of course this should be done enroute.

CONCLUSION

It is argued that fundamental principles taught in PHTLS – i.e. rapid assessment, key field interventions and rapid transport to the closest appropriate facility – have been shown to improve outcomes in critically injured trauma patients. [2] Whilst the content and practice of this American-based course is (in some aspects) different to current Australian practice and is based on different models of EMS, it is not necessarily bad, just different, and maintaining an open mind about new techniques and methods is important in one's professional development. Over time, we may well see more of the course content incorporated into Australian practice, with potentially, improved trauma outcomes.

RECOMMENDATION

Consider attending this course as part of your professional development.

Further information about PHTLS can be obtained from www.phtls.org ; www.health.qld.gov.au/skills/phtls.asp and www.phtls.org/datafiles/2004AustInfo.pdf

REFERENCES

1. PHTLS Australia. Information Prehospital Trauma Life Support. (n.d.). Retrieved February 8, 2005, from <http://www.phtls.org/datafiles/2004AustInfo.pdf>
2. McSwain, NE, Frame, S & Salomone, JP, editors. PHTLS – Basic and Advanced Prehospital Trauma Life Support. 5th ed. Missouri: Mosby; 2003.

Acknowledgements

Financial assistance was generously provided by the NSW Branch of the Australian College of Ambulance Professionals as part of their Scholarship Grants Program to assist both authors with a substantial part of the course registration fee.