First Neurosurgery Resident Boot Camp in Yangon, Myanmar 2017

Jack P. Rock, MD, FACS; Roberta P. Glick, MD; Isabelle Germano, MD; Kyi Hlaing, MD; Myat Thu, MD; Win Myaing, MD

CNS 2017 ANNUAL MEETING
BOSTON, MASSACHUSETTS
OCTOBER 7–11, 2017

Introduction

For the first time in SE Asia, a Fundamentals of Neurosurgery Boot Camp was held from February 24th-26th at University of Medicine I in Yangon, Myanmar. Myanmar has a population over 53 million and 16 practicing neurosurgeons. This course was styled after the Society of Neurological Surgeons boot camps to teach and train fundamental skills to young neurosurgery residents.

Methods

Day one: activities included lectures by faculty on neurosurgical techniques, head injury and intracranial pressure, patient positioning, stroke and more. Afterwards, small groups of residents and faculty reviewed clinical cases and finally industry demonstrations of surgical techniques prepared the residents for day two.

Day two: twelve workstations utilizing mannequins, surgical instruments, simulators and animal heads provided residents with hands-on experience including craniotomy and dural suture, shunt tapping/programming, ICP monitor placement/assessment, navigation for ventriculostomy, cervical and lumbar fusions, endoscopic third ventriculostomy and transnasal surgery; techniques commonly encountered in neurosurgical practice.

Written resident and staff evaluations (pre-meeting, immediately post-meeting and six months) consisting of 26 neurosurgical content and general comment questions were distributed. Workstation checklists were completed by supervising staff. Registration fees were waived through industry educational grant support.

Results

45 residents and 24 neurosurgical faculty from Myanmar, Cambodia, Nepal, Singapore, South Korea, Thailand, and Viet Nam attended. 92% of evaluations were completed prior to and after day two of the boot camp with scoring improved on content questions from 62.75% to 73.68%, respectively. All residents rotated to every work station and were assessed with checklists completed by supervising staff.

Conclusions

Boot camps provide fundamental didactic and technical exposure to neurosurgery residents in developed and developing countries and are a means for standardizing basic competencies in neurosurgery. This humanitarian model provides a cost-effective and sustainable solution to educational needs and demonstrates to local neurosurgeons how they can take ownership of their educational processes.

Learning Objectives

By the conclusion of this presentation, participants will understand the details of a boot camp, its impact on residents training in the developing world and its value in promoting neurosurgical practice standards.

References

none

Over 90 participants attended the boot camp including 45 neurosurgery residents, 25 neurosurgery staff and 15 company representatives.

AUTHORS

Jack P. Rock, MD – Director of Neurosurgery Residency Training Program, Department of Neurosurgery, Henry Ford Hospital, Detroit, Michigan

Dr. Roberta. Glick – Professor of Neurosurgery, Anatomy and Cell Biology, Rush university medical center, Chicago Medical School and University of Illinois at Chicago, Chicago, USA

Dr. I. Germano – Professor of Neurosurgery, Department of Neurosurgery, Director, Comprehensive Brain Tumor Program Mt. Sinai Medical Center, NYC, USA

Dr. Mathew Davis – Neurosurgery resident University of Alabama, Alabama, USA

Dr. Ernest Wright – Neurosurgery resident, Barrow Neurosurgical Institute, Phoenix, Arizona, USA

Professor Kyi Hlaing - Clinical Professor of Neurosurgery, Yangon General Hospital, University of Medicine II, Yangon. Myanmar

Professor Myat Thu - Professor and Head of Department of Neurosurgery, Yangon General Hospital, University of Medicine 1, Yangon, Myanmar

Mr. Tyler Prentiss - Program Coordinator, Global Health Initiative, Henry Ford Health System

Professor Zaw Wai Soe – Rector, University of Medicine 1, Yangon

Dr. Robert Dempsey – Professor and Chairman, University of Wisconsin, Madison

Mr. John Zervos, J.D. Director of the Golbal Health Initiative, Henry Ford Hospital

Professor Win Myaing, Co-director department of Neurosurgery, Yangon General Hospital, University of Medicine II, Yangon, Myanmar