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CONSENSUS STATEMENT

A consensus document on robotic surgery

D. M. Herron · M. Marohn · The SAGES-MIRA Robotic Surgery Consensus Group

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Robotic surgical devices have developed beyond the investigational stage and currently are routinely used in minimally invasive general surgery, pediatric surgery, gynecology, urology, cardiothoracic surgery, and otorhinolaryngology. Robotic devices continue to evolve. As they become less expensive and more widely disseminated, these devices likely will become more frequently used in surgical procedures. The leadership of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and the Minimally Invasive Robotic Association (MIRA) believed that guidelines for the use of robots in surgery were lacking, and that the surgical community would benefit from a consensus statement on robotic surgery including guidelines for training and credentialing.

To accomplish this task, SAGES and MIRA assembled an international multidisciplinary consensus group to draft a consensus statement. The SAGES-MIRA Robotics Consensus Conference was convened at Mount Sinai Medical Center in New York City on 2-3 June 2006. The task force addressed four distinct questions it believed were central to the use of robots in surgery:

1. *Training and credentialing.* How should training for robotic surgery be accomplished? What is the appropriate process for credentialing robotic surgery?
2. *Clinical applications of robots in surgery.* What are the appropriate clinical applications for robotic surgery? Has efficacy been demonstrated for these applications?
3. *Risks of surgery and cost–benefit analysis.* What are the physical risks of robotic surgery to the patient? What financial costs are involved in robotic surgery, and are these costs justified?
4. *Research.* What are the important unanswered questions in robotic surgery? What direction should future research take?

After meeting and presenting data regarding these issues in a didactic forum, the Robotic Task Force faculty was divided into four working groups to address these issues separately. The faculty then reconvened to review the working groups' conclusions and arrive at a generalized

The SAGES-MIRA Robotic Surgery Consensus Group:
A. Advincula (University of Michigan Medical Center, Ann Arbor, MI, USA), S. Aggarwal, M. Palese (Mount Sinai School of Medicine, New York, NY USA), T. Broderick (University of Cincinnati College of Medicine, Cincinnati, OH USA), I. Broeders (University Medical Centre Utrecht, Heidelberglaan, Netherlands), A. Byer (Hackensack University Medical Center, Wyckoff, NJ, USA), M. Curet (Stanford Medical Center, Stanford, CA, USA), D. Earle (Baystate Medical Center, Springfield, MA, USA), P. Giulianotti (Misericordia Hospital, Grossero, Italy), W. Grundfest (University of California Los Angeles, Los Angeles, CA, USA), M. Hashizume (Kyushu University, Fukuoka, Japan), W. Kelley (Henrico Doctors' Hospital, Richmond, VA, USA), D. Lee, G. Weinstein (Presbyterian Medical Center, Philadelphia, PA, USA), E. McDougall (University of California Irvine Medical Center, Orange, CA, USA), J. Meehan (University of Iowa Hospital, Iowa City, IA, USA), S. Melvin (Ohio State University Hospital, Columbus, OH, USA), M. Menon (Henry Ford Hospital, Detroit, MI, USA), D. Oleynikov (Nebraska Medical Center, Omaha, NE, USA), V. Patel MD (Ohio State University Medical Center, Columbus, OH, USA), R. Satava (University of Washington Medical Center, Seattle, WA, USA), S. Schwaitzberg (Cambridge Health Alliance, Cambridge, MA, USA)

D. M. Herron (✉)
Department of Surgery, Mount Sinai School of Medicine,
1 Gustave L. Levy Place, #1259, New York, NY 10029, USA
e-mail: daniel.herron@mountsinai.org

M. Marohn
Department of Surgery, Johns Hopkins School of Medicine,
Baltimore, MD, USA

The SAGES-MIRA Robotic Surgery Consensus Group
Las Angeles, CA, USA