Preface

New directions and technologies for minimal invasive thoracic surgery

Since the use of video-assisted thoracoscopic technique and refinement of related endoscopic instruments, minimal invasive thoracic surgery has developed vary rapidly in the management of various kinds of thoracic and cardiovascular diseases. Until now, minimal invasive thoracic surgery is not just an alternative to thoracotomy or sternotomy, but has become a standard in the treatment of many cardiothoracic diseases. In the recent meeting of The 11th Asia Pacific Congress of Endoscopic and Laparoscopic Surgery (ELSA) in Taipei on November 21-24, 2013, we invited many physicians, surgeons, and anesthesiologists to share about their experiences in the development of new concepts, refinement of new technologies, and collaboration of multiple disciplines for minimal invasive thoracic surgery.

This special issue of the *Journal of Thoracic Disease* extends the ideas, presentations, and discussions of this exciting meeting to provide a comprehensive overview on a variety of aspects related to the recent advances in minimal invasive thoracic surgery, with a special emphasis on the nonintubated anesthetic techniques (1-4). Through the articles, readers can have a clear idea regarding the initiation and implementation, as well as the current indications and future perspectives of this novel technique. As for the evolving techniques of thoracoscopic surgery, single-port and natural orifice surgery will definitely play important roles in the near future (5,6). And thoracoscopic surgery can be an effective alternative to thoracotomy in situations such as systematic lymphadenectomy for lung cancer and reoperation for postoperative recurrent primary spontaneous pneumothorax (7,8). Finally, the current status and personal experience of video-assisted or robotic-assisted cardiac surgery are also provided (9,10).

I am grateful to our guest speakers and invited authors who have shared their expertise and contributed diverse and comprehensive knowledge for this excellent issue. With new technologies and refined instruments, it is time to reconsider the new directions of minimal invasive thoracic surgery.

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