THE 2009-2011 INTERNATIONAL PULMONARY ENDARTERECTOMY (PEA) SURVEY: UPDATE, PRELIMINARY RESULTS, OUTLOOK

M Scheffler1,2, M Wolff5, N Striegl5, M Weigand5, P Roth3, J Gehron5, I Welters5, R Boedeker5, J Herrmann5, E Mayer8

1 Department of Anesthesia, QE II Health Sciences Centre, Halifax, Canada
2 Department of Anesthesia, University Hospital Giessen and Marburg, Germany
3 Division of Cardiac Surgery, University Hospital Giessen and Marburg, Germany
4 Perfusion Services, University Hospital Giessen and Marburg, Germany
5 Department of Intensive Care, Royal University Hospital, Liverpool, United Kingdom
6 Institute for Medical Informatics, University of Giessen, Germany
7 Computing Centre, University of Giessen, Germany
8 Division of Thoracic Surgery, Kerckhoff Heart and Lung Center, Bad Nauheim, Germany

Objective: Although it is believed that patients undergoing PEA benefit from an efficient multidisciplinary approach including anesthesia, intensive care, and perfusion (1-3), there is limited data on the perioperative management of PEA. We hypothesized that a survey among major PEA centres worldwide would reveal great interest, being reflected by a high participation rate. Methods: A comprehensive online survey with a total of 144 questions has been conducted among 27 major PEA centres from May, 2010, until April, 2011. Results: As of April 11, 2011, 15 of 27 PEA centres have participated (55.6%, table 1), four of which turned out to have operated less than 10 cases in 2009.

Table 1: participation rate

Participation rates of affiliated departments of anesthesia / intensive care / perfusion were 86.7% / 86.7% / 80 % (current treatment) and 80% / 60% / 66.7% (patient data). Overall number of cases operated per centre ranged from 22 to 2,600 (total: n=5,257). In-hospital-mortality ranged from 0 to 25% (n=15). Year 2009 data on preoperative severity of disease were available in 13 of 15 centres (86.7% WHO functional class, 66.7% six minute walk test, 53.3% Borg dyspnea index, 86.7% mean pulmonary artery pressure, 80% pulmonary vascular resistance, 20% NT-pro-BNP, 33.3% other). Conclusions: A high participation rate of 55.6% indicates great interest in this subject. Further evaluation of the large PEA Survey data pool will provide more input, which again may help assess various aspects of management of PEA, and thereby help improve existing practices and levels of delivery in this challenging field.