

Surgery, Medical School, Kiel, Germany; University of Wisconsin Department of Cardiothoracic Surgery, Medical School, Madison, Wisconsin, USA

Invited Discussant: T Walther, Leipzig

10:15 **Mechanisms of failure of aortic valve repair: an intraoperative transoesophageal echocardiographic study**

J-B Le Polain de Waroux; A-C Pouleur; A Pasquet; M Van Dyck; P Noirhomme; J-L J Vanoverschelde; G El Khoury

Cliniques Universitaires, St Luc Universite Catholique de Louvain, Brussels, Belgium

Invited Discussant: M J Antunes, Coimbra

Auditorium 3&4 Session 6

Thymus

Chairmen: L Spaggiari, Milan
P Van Schil, Antwerp

09:30 **Clinical outcomes of video-assisted thoracoscopic surgery (vats) for thymomas**

A Thirugnanam¹; J L Soon²
1 National Cancer Center, Singapore;
2 National Heart Center, Singapore

09:42 **Plasmapheresis before thymectomy in myasthenia gravis: routine vs. Selective protocols**

K Al-Kattan¹; H El-Bawab¹; W Hajjar²; M Rafay¹; A Bamousa¹; A Khalil¹

1 King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia;
2 King Khalid University Hospital, Riyadh, Saudi Arabia

09:54 **Association of thymoma and myasthenia gravis: oncological and neurological results of surgical treatment**

M Lucchi; F Melfi; P Dini; F Davini; L Duranti; A Viti; A Mussi
Azienda Ospedaliera Universitaria Pisana, Pisa, Italy

10:06 **Early masaoka stage and complete resection is important for the prognosis of thymic carcinoma: from the 20-year experience of a single institution**

C Y Lee; I K Park; M K Bae; K Chung
Department of Thoracic and Cardiovascular Surgery Yonsei University College of Medicine, Seoul, Korea (South)

10:18 **Long-term outcome of extended thoracoscopic thymectomy for nonthymomatous myasthenia gravis**

E Pompeo; F Tacconi; R Massa; G Bernardi; T C Mineo
Department of Thoracic Surgery, Policlinico Tor Vergata University, Rome, Italy

Auditorium 2 Session 7

Kimberly-Clark InteguSeal* microbial sealant wins medical design excellence award

InteguSeal*, the innovative microbial sealant from Kimberly-Clark Health Care, has been singled out for a prestigious medical design excellence award.

Designed to reduce the risk of skin flora contamination throughout a surgical procedure,

InteguSeal* Microbial Sealant (www.integuseal.com) uses a proprietary formulation to seal and immobilize pathogens to help protect against migration into an incision. To date, InteguSeal* has been used in more than 150,000 applications during surgical procedures across the world.

The US-based 2008 Medical Design



Excellence Awards (MDEA) competition is organized and presented by Canon Communications LLC (Los Angeles) and is the only awards program that exclusively recognizes contributions and advances in the design of medical products. Entries are evaluated on the basis of their design and engineering features, including inno-

vative use of materials, user-related functions that improve health care delivery and change traditional medical attitudes or practices, features that provide enhanced benefits to the patient and the ability of the product development team to overcome design and engineering challenges so the product meets its clinical objectives.

A comprehensive review of the entries was performed by a multidisciplinary panel of third-party jurors with expertise in biomedical engineering, human factors, industrial design, medicine and diagnostics. InteguSeal* received the top gold award in the sur-

gical equipment, instruments and supplies category of the MDEA competition.

"We are honoured and delighted to be recognized by the MDEA judges for InteguSeal* Microbial Sealant," said Kimberly-Clark Vice President of Global Sales and Marketing John Amat. "This award recognizes the important work that medical device companies are doing to advance the design and functionality of products that contribute to improved patient outcomes and aid medical professionals on the front lines of delivering care."

The 2008 Medical Design Excellence Award winners were honoured at a ceremony during the Medical Design & Manufacturing (MD&M) East Conference and Exposition, June 3–5, 2008, at New York City's Jacob K. Javits Convention Center.

Does pretransplant LVAD support improve results after heart transplantation in patients with elevated PVR?

Orthotopic heart transplantation is the gold standard for patients with terminal heart failure. Progress in the underlying disease leads to backward failure and changes in the pulmonary circulation, eventually leading to decreased right ventricular function. Remodelling of the pulmonary vasculature occurs quickly, at first reversible, but at some point becoming irreversible, resulting in a fixed pulmonary vascular resistance (PVR). However, an absolute cut-off value of PVR does not exist. The right ventricle of the donor heart tolerates increased PVR poorly, resulting in acute perioperative right-sided failure, which can be difficult to manage pharmacologically. After heart transplantation in patients with elevated PVR, the majority of survivors will normalize their PVR which questions the irreversibility of elevated resistance.

Pulmonary hypertension (PHT) is a risk factor for early and late death after heart transplantation. There is a consensus that PVR < 2.5 Wood units (WU) and resistant to pharmacologic dilatation increases the risk

of death after cardiac transplantation and PVR < 5 WU is regarded as a contraindication for heart transplantation. Recently it has been shown that circulatory support with a left ventricular assist device (LVAD) can reduce the resistance in the pulmonary vasculature. It has furthermore been shown that transplanted patients with elevated PVR pre-treated with LVAD have as good a survival as patients with normal PVR. After those important findings we now consider pretransplant LVAD implantation to be indicated rather than contraindicated in patients with elevated PVR.

The purpose of this study was to determine the outcome of pretransplant treatment with LVAD com-



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pared to direct transplantation in patients with elevated PVR.

All heart transplant recipients at Sahlgrenska University Hospital, Gothenburg, during the period 1988-2007 with pretransplant PHT were divided into two groups. Group 1 were patients without LVAD treatment (n=58) and group 2 patients treated with LVAD prior to transplant (n=11).

Group 1 had a mean pretransplant PVR of 3.2 ± 0.7 . Group 2 had a mean pretransplant PVR of 3.2 ± 0.9 that was reduced to 2.1 ± 0.6 after LVAD treatment. Two cases of acute right heart failure after transplantation required mechanical support in group 1. None of the patients in group 2 developed perioperative right heart failure requiring mechanical support. The incidence of other perioperative complications was comparable between the two groups. Four-year survival in group 1 and 2 was 70% and 63 %, respectively.

Pretransplant LVAD treatment reduced the pulmonary pressure in heart transplant recipients with PHT but there was no statistically significant difference in short-term survival in patients treated with or without LVAD. The relatively good results in patients with elevated PVR and no prior LVAD treatment can be accredited early and powerful pharmaceutical treatment of right heart failure.