1408 Single versus bilateral internal thoracic artery grafts with concomitant saphenous vein grafts for multivessel coronary artery bypass grafting: Effects on mortality and event-free survival

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This study retrospectively compares 2547 patients who underwent single internal thoracic artery grafting plus saphenous vein grafting (SVG) with 1835 patients who underwent bilateral thoracic artery grafting (BITA) plus SVG at long-term follow-up. After correction with propensity score, patients who underwent BITA plus SVG had superior survival and a reduction in the rate of cardiac events 10 years after the operation.

1416 Replacement of the aortic root for acute prosthetic valve endocarditis: Prosthetic composite versus aortic allograft root replacement

Rainer G. Leyh, MD, PhD, Karsten Knobloch, MD, Christian Hagl, MD, Arjang Ruhparwar, MD, Stefan Fischer, MD, MSc, Theo Kofidis, MD, and Axel Haverich, MD, PhD, Hannover, Germany

We analyzed the effect of composite or homograft aortic root replacement for the treatment of PVE in 29 patients. Our results showed that excellent long-term results can be achieved regardless of the material used for aortic root replacement in patients with PVE.

1421 Early bypass occlusion after deployment of Nitinol connector devices

Oliver Reuthebuch, MD, Alexander Kadner, MD, Mario Lachat, MD, Andreas Künzli, MD, Ulrich P. Schurr, MD, and Marko I. Turina, MD, Zurich, Switzerland

The SACS appears to be a promising new device facilitating OPCAB surgery without the need for side clamping the aorta. However, routine application of the SACS might have to be reserved for patients with a severely calcified aorta for whom no other techniques are feasible.

1427 Cryorecanalization: A new approach for the immediate management of acute airway obstruction [VIDEO]

Martin Hetzel, MD, Juergen Hetzel, MD, Christian Schumann, MD, Nikolaus Marx, MD, and Alexander Babiak, MD, Ulm, Germany

Airway recanalization with a newly developed flexible cryoprobe was evaluated in a prospective feasibility study. In 50 of 60 patients, the newly developed cryoprobe permitted effective and safe therapy of endobronchial stenoses of the respiratory tract.

1432 Psychosocial and sexual concerns of patients with implantable left ventricular assist devices: A pilot study

Louis E. Samuels, MD, Elena C. Holmes, CRNP, and Ralph Petrucci, PhD, Wynnewood and Philadelphia, Pa

A patient discharged to home with an implantable LVAD has become a common event. This pilot study was designed to address the psychosocial and sexual concerns of outpatients with LVADs awaiting heart transplantation.
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#### Surgery for Congenital Heart Disease (CHD)

1436 Insulin-like growth factor 1 improves the relationship between systemic oxygen consumption and delivery in piglets after cardiopulmonary bypass  
Jia Li, MD, PhD, Elisabeth Stenbøg, MD, PhD, Andrew Bush, MD, FRCP, Thorbjørn Grofte, MD, PhD, Andrew N. Redington, MD, FRCP, and Daniel J. Penny, MD, FRCPI, Toronto, Ontario, Canada; Aarhus, Denmark; London, United Kingdom; and Melbourne, Australia

Intravenous infusion of insulin-like growth factor 1 improved balance of oxygen transport by significantly reducing $\dot{V}O_2$ as well as increasing cardiac output and $DO_2$ during the first 6 hours after CPB in piglets. This may have important clinical implications in the care of critically ill children after surgery with CPB.

1442 Pulmonary expression of the hepatocyte growth factor receptor c-Met shifts from medial to intimal layer after cavopulmonary anastomosis  
Akio Ikai, MD, R. Kirk Riemer, PhD, Xiaoyuan Ma, MD, Olaf Reinhartz, MD, Frank L. Hanley, MD, and V. Mohan Reddy, MD, Palo Alto, Calif

We examined PA expression of hepatocyte growth factor–specific receptor c-Met and downstream antiapoptotic signal, Bcl-2, for their potential role in PA remodeling. After CPA, c-Met expression was increased in the intimal layer and decreased in the medial layer.

1450 Hypoxic pulmonary vasoconstriction disappears in a rabbit model of cavopulmonary shunt  
Akio Ikai, MD, Mikiyasu Shirai, MD, PhD, Kazunobu Nishimura, MD, PhD, Tadashi Ikeda, MD, PhD, Takayuki Kameyama, MD, Koji Ueyama, MD, and Masashi Komeda, MD, PhD, Kyoto and Osaka, Japan

We developed a rabbit cavopulmonary shunt model and studied the physiologic characteristics of its pulmonary arteries after cavopulmonary shunt. Two weeks after the operation, the acinar and lobular (resistance) arteries both showed a reduction in the basal vascular tone, and no hypoxic vasoconstriction was present.

1458 Phosphorylcholine or heparin coating for pediatric extracorporeal circulation causes similar biologic effects in neonates and infants  
Andreas Böning, MD, Jens Schewe, MD, Thomas Ivers, ECCP, Christine Friedr,ich, PhD, Jürgen Stieh, MD, Sandra Freitag, PhD, and Jochen T. Cremer, PhD, Kiel, Germany

In a prospective randomized study the influence on inflammatory markers and clinical outcome of 2 different oxygenators with different surface coatings was investigated in 40 neonates and infants. Surface coating with either heparin or phosphorylcholine seems to have similar biologic effects in neonates and infants undergoing cardiac surgery.

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