THE 1+1 TRIAL: A PROSPECTIVE TRIAL OF A DUAL-VERSUS A SINGLE-CHAMBER IMPLANTABLE DEFIBRILLATOR IN PATIENTS WITH SLOW VENTRICULAR TACHYCARDIAS, by Bänsch et al.

Implantable cardioverter defibrillators (ICDs) are used with increasing frequency to treat patients with ventricular tachycardia (VT). Inappropriate therapies due to misclassification of supraventricular tachycardia as VT have remained an important clinical problem, particularly for patients with relatively slow VTs, which could be influenced by use of dual-chamber (DCH) compared with single-chamber devices and the programmed ICD detection algorithms. The 1+1 Trial reported by Bänsch et al randomized patients with slow monomorphic VT and no primary indication for DCH pacing to be treated with either a DCH ICD set with a long tachycardia detection interval (TDI) or a single-chamber ICD. Treatment with a DCH ICD and long TDI was superior to a single-chamber ICD for preventing a composite end point of failure to properly respond to a VT episode or delivering an inappropriate shock therapy for a supraventricular arrhythmia. This study provides important data to help define the problem and guide selection of ICD type and programming in patients with slow monomorphic VT. See p 1022.

EFFECTS OF PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY AND ENDOVASCULAR BRACHYTHERAPY ON VASCULAR REMODELING OF HUMAN FEMOROPOLITEAL ARTERY BY NONINVASIVE MAGNETIC RESONANCE IMAGING, by Wyttenbach et al.

Percutaneous transluminal angioplasty (PTA) of severe peripheral vascular stenoses is plagued by high rates of restenosis. In a randomized trial of PTA alone versus PTA plus endovascular brachytherapy (EVBT) for femoral artery stenoses, Wyttenbach et al report that lumen area and total vessel area increase similarly in both groups at 24 hours, with evidence of plaque disruption. By 3 months, regression of these changes had occurred in the PTA-alone group, whereas further outward remodeling had occurred in the EVBT group, though plaque disruption was still evident in many EVBT patients. These data suggest that EVBT prevents inward remodeling after PTA, at a cost of persistent plaque disruption in some patients. Moreover, this study demonstrates that the use of serial noninvasive imaging by MRI after vascular intervention can be used to illuminate temporal changes in vessel structure at more timepoints than are feasible with invasive techniques, advancing the ability to study the pathophysiology of restenosis. See p 1156.

EARLY STATIN TREATMENT IN PATIENTS WITH ACUTE CORONARY SYNDROME: DEMONSTRATION OF THE BENEFICIAL EFFECT ON ATHEROSCLEROTIC LESIONS BY SERIAL VOLUMETRIC INTRAVASCULAR ULTRASOUND ANALYSIS DURING HALF A YEAR AFTER CORONARY EVENT: THE ESTABLISH STUDY, by Okazaki et al.

Statins have been shown to delay both angiographic progression of atherosclerosis and clinical events in patients with hypercholesterolemia or normal lipid profiles. These benefits have been attributed largely to the effects of statins on plaque stabilization. In patients with acute coronary syndromes, early initiation of statins results in improved clinical outcomes; however, the mechanism by which statins modulate these beneficial effects remains incompletely understood. In this study by Okazaki and colleagues, 70 patients with acute coronary syndromes were randomized to atorvastatin or usual care after percutaneous coronary intervention and intravascular ultrasound assessment. At 6 months’ follow-up, repeat intravascular ultrasound revealed a significant reduction in plaque volume at a nonintervention site in atorvastatin-treated, as compared to usual-care, patients. These preliminary observations suggest that early treatment with atorvastatin promotes plaque stabilization in patients with acute coronary syndromes. See p 1061.

Visit www.circ.ahajournals.org:

Images in Cardiovascular Medicine
“Shrink-Wrapped” Permanent Pacemaker. See p e79.

Transplant Vasculopathy: Evaluation With Multi-Detector Computed Tomography. See p e80.
Issue Highlights

Circulation. 2004;110:1021

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2004 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/110/9/1021

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/