

should engender caution in any research clinician engaged in the induction of ischemia in individuals with coronary artery disease about to undergo elective coronary artery revascularization.⁵

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In Reply:—Since significant left main coronary artery stenosis represents an absolute indication for surgical therapy requiring general anesthesia, these patients should not be excluded from a clinical study aiming at a relevant contribution to the worldwide discussion of whether and which anesthesia benefits the patient with coronary artery disease. I would share in Dr. Harte's concern only if we had not excluded patients with unstable angina pectoris.

The second concern refers to the removal of β -blocker therapy for 12 h prior to our study. The period of increased β -adrenergic sensitivity which might be associated with a propranolol withdrawal syndrome is between days 4 and 9 after drug discontinuation.¹ It is very unlikely, therefore, that untoward effects appear within the short time interval of 12 h after removing β -adrenoceptor blockers.

Dr. Harte believes that we could have utilized regional wall motion analysis as the most sensitive means for detecting myocardial ischemia, and cites the work of Smith *et al.*² These authors have established the superiority of two-dimensional transesophageal echocardiography (2-D TEE) over the ECG for detection of intraoperative ischemia. However, since one significant limitation of 2-D TEE is that it cannot be used in awake

patients, this technique was not suitable for our study. In addition, the criteria for analyzing ultrasound data are still being debated.^{3,4} Conscious of the limitations of the ECG, we have used PCWP and CVP waveform analysis, which has been shown to be a sensitive method in the diagnosis of myocardial ischemia.^{5,6} In our patients, prominent a/v-waves disappeared within a few minutes after termination of pacing.

In supporting the concept of the "stunned" myocardium (prolonged post-ischemic ventricular dysfunction after repeated myocardial ischemia), Dr. Harte refers to dog experiments in which the left anterior descending coronary artery was repeatedly occluded for up to 15 min.⁷ I do not think that cumulative experimental ischemia terminating in myocardial necrosis after repetitive total and prolonged coronary occlusions is a convincing argument against the pacing stress test, which has been recognized as a safe investigative tool for clinical research in patients with coronary artery atherosclerosis for 20 yr.⁸ To further support his concern that even brief episodes of ischemia may severely disturb the metabolic, functional, and structural integrity of the ventricle for days, Dr. Harte incorrectly cites a 9-yr-old abstract published by Ricci *et al.*⁹ These authors, using biplane ventriculography in nine patients with coronary

artery disease, observed persistent regional myocardial dysfunction in the first seven to ten beats after cessation of rapid atrial pacing, but not for days. Data from Tomoike *et al.*¹⁰ showed that regional myocardial function in compromised areas returned to the prepacing control level within approximately 5 min.

Numerous other cardiologists have used atrial pacing for clinical studies (including the evaluation of drug effects on myocardial oxygenation) because of its safety and ease of reversibility, and their results have been published in esteemed medical journals.^{4,11-14} Have all these distinguished clinicians worked outside the bonds of medical ethics? Or does a pacing study become less ethical when performed by anesthesiologists?

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HTLV-III Is Now HIV

To the Editor:—In their excellent review of a complex subject,¹ Kunkel and Warner neglected to mention the important point that the causative agent of AIDS is now referred to as the *human immunodeficiency virus*, or HIV.* This has hopefully put an end to any confusion or conflict engendered by previous names for the retrovirus, and will allow for systematic subclassification of genomic variants.

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* CDC: Update: Acquired Immunodeficiency Syndrome—United States. *Morbidity and Mortality Weekly Report* 35:757-768, 1986.