LETTERS TO THE EDITOR

Letters to the Editor will be published, if suitable, and as space permits. They should not exceed 1,000 words, double spaced, in length, and may be subject to editing or abridgment.

Coronary Arteriography

To the Editor:

Drs. Green, McKinnon, Rosch, and Judkins report their complications of selective percutaneous transfemoral coronary arteriography and prevention in Circulation 45: 552, 1972, and state on page 556 that during the procedure flushing and the continuous drip delivery of saline should not be done while the catheter is in the coronary artery. A subsequent study from the same institution authored by Drs. Kloster, Friesen, Green, and Judkins stating the effects of coronary arteriography on myocardial blood flow, Circulation 46: 438, 1972, has a discrepancy for which I would like further clarification. During the study on the effects of coronary arteriography on myocardial blood flow using methylglucamine diatrizoate (Renografin-76) the myocardial blood flow was noted to increase and the sham injections of a similar quantity of normal saline did not give the same response. At our hospital we make it a fastidious point not to inject any solution except for the contrast media into the coronary arteries and, therefore, wonder how the saline infusion affected their study.

L. A. IANNONE, M.D., MAJ, MC
Chief, Coronary Care Unit
and Cardiovascular Laboratory
William Beaumont General Hospital
El Paso, Texas

The authors reply:

To the Editor:

I have reviewed Dr. Iannone’s letter and, as I understand it, the question is how the sham 7.0 cc normal saline injections affected the patients. There was no measurable change in the patient’s electrocardiogram and blood pressure during the sham injections and the patient had no systemic symptoms. There did not appear to be any adverse effect to the normal saline injections.

Despite this, we do not flush the catheter when it is in the coronary artery or maintain a continuous drip of either saline or contrast media. The normal saline injections were part of the myocardial blood flow study only and are not a part of routine coronary arteriography.

GERALD S. GREEN, M.D.
Radiology Department
Good Samaritan Hospital
Portland, Oregon

Atrial Standstill Secondary to Atrial Inexcitability

To the Editor:

In Circulation 46:690, 1972, Albert L. Waldo, M.D., et al. report on atrial standstill secondary to atrial inexcitability (atrial quiescence) in 11 patients following open-heart surgery. We have noticed four cases of digitalis toxicity in patients with atrial fibrillation in which atrial quiescence occurred with the development of A-V junctional rhythm. We have also noted that atrial activity in the nature of atrial fibrillation recurred on the electrocardiogram when digitalis was discontinued and toxicity subsided.

We have not had the opportunity to confirm the presence of atrial quiescence by infraatrial recording. However, the disappearance of atrial activity in atrial fibrillation during digitalis toxicity and its reappearance when digitalis has been withdrawn, is noteworthy. Our observation has also included that in intermittent A-V junctional rhythm in the presence of atrial fibrillation, the atrial activity has shown lower voltage than during episodes of no toxicity. In patients with atrial fibrillation, potentials can be recorded from the atrium, although they are refractory to pacing. In two cases, Patton could record no atrial activity. However, bundle of His impulses preceded each regular ventricular complex.

Waldo et al. asked the question, “is the S-A node also quiescent or is there exit block?” The presumed experience which we have noted above in the presence of atrial fibrillation would suggest that there is direct action on the atrial muscle and that one need not hypothesize S-A node quiescence or exit block.

Chung gives six examples of A-V junctional tachycardia as a manifestation of digitalis toxicity in the presence of atrial fibrillation. The atrial activity (fibrillation) remains visible in all six. We have seen this also but the cases we alluded to show no atrial activity, coarse or fine, and are compatible with atrial quiescence.

Cushny, in 1897, described this phenomenon in animals and Lewis in 1913, and White in 1915 recorded this occurrence in humans. Bellet shows a case of digitalis toxicity (fig. 48-5) with no atrial activity but after digitalis has been withdrawn, atrial fibrillation is again noted (fig. 48-7). Therefore, although this independent observation is not new, it warrants further study.

S. EPSTEIN, M.D.
Attending Cardiologist
Maimonides Medical Center
Brooklyn, New York
Dr. Epstein notes in his letter, the absence of atrial activity has been associated with digitalis toxicity. We agree with Dr. Epstein that his four patients in whom atrial activity in the ECG disappeared during digitalis toxicity may well have had atrial quiescence, but that this was not confirmed. However, the rest of Dr. Epstein's discussion relates to atrial fibrillation in the presence of AV junctional rhythm. Atrial fibrillation is not atrial quiescence by our definition and should not be confused with it. Therefore, the question in our manuscript which asked whether in the presence of atrial quiescence the sinus node is also quiescent or whether there is sinus node exit block remains unanswered.

ALBERT L. WALDO, M.D.
Associate Professor
Department of Medicine
University of Alabama
Birmingham, Alabama
Atrial Standstill Secondary to Atrial Inexcitability

SAMUEL ÉPSTEIN

Circulation. 1973;47:913-914
doi: 10.1161/01.CIR.47.4.913-b

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 1973 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/47/4/913.3.citation

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/