To the Editor:

The case reported by Drs. Harrison and Martin once again illustrates a point in the wide spectrum of rhythm disturbances which can be seen with sarcoid heart disease. The heart block which was documented in their patient in 1975 apparently was of recent onset and was symptomatic. Their figure shows block above the level of the His bundle. It is not clear whether or not they searched for split His potentials which could suggest sarcoid involvement lower in the conducting system. The followup of this patient over the next 5½ years revealed a change in the dominant rhythm which could have represented progression of the disease below the level of the AV node.

Since our initial report, we have evaluated two other patients with systemic sarcoidosis with a different presentation which seems to support our original hypothesis.

Case Reports

The first patient was a 24-year-old black woman who presented with episodes of recurrent ventricular tachycardia (Fig 1) which caused syncope. Her electrophysiologic study revealed normal conduction intervals, but easily inducible ventricular tachycardia with a morphology identical to her spontaneous ventricular tachycardia. She was treated with multiple antiarrhythmic agents, but the inducible ventricular tachycardia could not be suppressed, and the patient ultimately died with out-of-hospital sudden cardiac death.

The second patient is a 24-year-old black woman who presented with poorly defined episodes of dizziness and syncope. Repeated sessions of Holter monitoring were performed, but the patient never had an episode of dizziness or syncope while wearing the Holter monitor. Electrophysiologic study revealed only a slightly prolonged AH (160 msec) which normalized with atropine. However, ventricular tachycardia (Fig 2) was easily inducible. Induction of ventricular tachycardia precisely reproduced the patient’s spontaneous symptoms. Since the patient has been treated with quinidine sulfate she has had no further episodes.

Findings in these two and our previous two patients with systemic sarcoidosis confirm that the arrhythmias associated with systemic sarcoidosis include a wide variety of bradyarrhythmias and tachycardias, and their electrophysiologic findings and prognosis may be quite different.

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Figure 1. Twelve lead electrocardiogram during the patient's spontaneous ventricular tachycardia, which was the same arrhythmia which was inducible.

Figure 2. Electrophysiologic study in the second patient. Surface leads 1, 2, and V, are recorded simultaneously with intracardiac leads in the right atrium (RA) and right ventricle (RV). During ventricular drive (S), premature stimuli (S, S,) are introduced which initiate a ventricular tachycardia of variable morphology.

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