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ABSTRACTS IN CARDIOLOGY

Need you biopsy for acute myocarditis?

The Mason trial of treating acute myocarditis has appeared. One of the most significant results is that at most 10% of subjects with clinically suspected acute myocarditis will have a positive tissue confirmation. Because a positive tissue diagnosis was an entry criteria the trial turned out rather smaller than hoped. Nevertheless there is nothing to suggest

that immunosuppression is beneficial. The implication is that cardiac biopsy if carried out with the sole aim of establishing a diagnosis to aid treatment is not a useful procedure. Numerous questions remain. What disease is present and what is the prognosis of those patients with a negative biopsy?

M J DAVIES

A clinical trial of immunosuppressive therapy for myocarditis

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Background—Myocarditis is a serious disorder, and treatment options are limited. This trial was designed to determine whether immunosuppressive therapy improves left ventricular function in patients with myocarditis.

Methods—We randomly assigned 111 patients with a histopathological diagnosis of myocarditis and a left ventricular ejection fraction of less than 0.45 to receive conventional therapy alone or combined with a 24-week regimen of immunosuppressive therapy. Immunosuppressive therapy consisted of prednisone with either cyclosporine or azathioprine. The primary outcome measure was a change in the left ventricular ejection fraction at 28 weeks.

Results—In the group as a whole, the mean (\pm SE) left ventricular ejection fraction improved from 0.25 ± 0.01 at base line to 0.34 ± 0.02 at 28 weeks ($P < 0.001$). The mean change in the left ventricular ejection fraction at 28 weeks did not differ significantly between the group of patients

who received immunosuppressive therapy (a gain of 0.10; 95 percent confidence interval, 0.07 to 0.12) and the control group (a gain of 0.07; 95 percent confidence interval, 0.03 to 0.12). A higher left ventricular ejection fraction at base line, less intensive conventional drug therapy at base line, and a shorter duration of disease, but not the treatment assignment, were positive independent predictors of the left ventricular ejection fraction at week 28. There was no significant difference in survival between the two groups ($P = 0.96$). The mortality rate for the entire group was 20 percent at 1 year and 56 percent at 4.3 years. Features suggesting an effective inflammatory response were associated with less severe initial disease.

Conclusions—Our results do not support routine treatment of myocarditis with immunosuppressive drugs. Ventricular function improved regardless of whether patients received immunosuppressive therapy, but long-term mortality was high. (*N Engl J Med* 1995;333:269-75.)