Letters to the Editor

Clinical Characteristics of Ruptured Chordae Tendinae in Hospitalized Patients: Primary Tear Versus Infective Endocarditis

S. PORTUGESE, H. AMITAL, A. TENENBAUM, Y. BAR-DAYAN,
Y. LEVY, A. AFEK, J. SHEMESH, Y. SHOENFELD:
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To the Editor:

I read with interest the article on ruptured chordae tendinae by Portuguese *et al.* That mitral valve prolapse was present in 35% (7/20) of their patients was not unexpected. However, their finding of a very high incidence of 85% (6/7) with infective endocarditis was surprising.

I would like to offer two explanations for this unusual finding. First, this was a retrospective rather than a prospective study and thus suffers from the usual limitations and biases of a retrospective study. Second, this series consisted of hospitalized and therefore sicker patients only.

My personal experience is that the commonest cause of ruptured chordae tendinae is mitral valve prolapse¹ and that rupture of chordae tendinae may occur spontaneously in mitral valve prolapse without significant changes in symptomatology that prompt patients to be hospitalized.² Grenadier *et al.*³ reported that 75% of their patients with mitral valve prolapse and echocardiographic evidence of ruptured chordae tendinae did not have symptomatic deterioration. Very often I have seen spontaneous and often asymptomatic rupture of chordae tendinae in patients with mitral valve prolapse, either in the echocardiographic laboratory for evaluation of a murmur suspicious for mitral valve prolapse or in the operating room where the patients are undergoing mitral valve repair or replacement for significant mitral regurgitation.

Therefore, I would like to suggest that if Portuguese *et al.* would do a prospective study of all their patients with mitral valve prolapse, they would find more patients with spontaneous rupture of chordae tendinae than with infective endocarditis.

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References

1. Barlow JB, Cheng TO: Mitral valve billowing and prolapse. In *The International Textbook of Cardiology* (TO Cheng, Ed.), p. 497–524. New York: Pergamon Press, 1987
2. Cheng TO: Mitral valve prolapse. *Dis Month* 1987;33:481–534

3. Grenadier E, Alpan G, Keidar S, Palant A: The prevalence of ruptured chordae tendinae in the mitral valve prolapse syndrome. *Am Heart J* 1983;105:603–610

Author's reply:

We thank Prof. Cheng for his comments. Our case series consisted of patients hospitalized because of severe symptoms due to the ruptured chordae tendinae. Thus, as Prof. Cheng mentioned, they were sicker than the patients in outpatient clinics and this may be the explanation for the high number of patients with mitral valve prolapse associated with infective endocarditis. Of interest is the study by Naggar *et al.*,¹ which followed 145 patients older than 60 years with mitral valve prolapse and demonstrated spontaneous rupture of chordae tendinae in 33 patients (23%). Four other patients had ruptured chordae tendinae associated with infective endocarditis.

We share Dr. Cheng's personal experience regarding un-hospitalized patients with mitral valve prolapse. Indeed, the cases of ruptured chordae tendinae are by far more common than infective endocarditis.

More studies on this subject in hospitalized patients will clarify the issue.

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References

1. Naggar CZ, Pearson WN, Seljan MP: Frequency of complications of mitral valve prolapse in subjects aged 60 years and older. *Am J Cardiol* 1986;58:1209–1212

Pulmonary Embolism and Impending Paradoxical Embolism: A Role for Transesophageal Echocardiography?

C. ALEXIOU, R.A. HENDERSON, D. RICHENS: *Clin Cardiol* 1998;21:363–364

To the Editor:

Alexiou *et al.* describe a patient presenting subacute massive pulmonary embolism with impending paradoxical embolism across the interatrial septum. The patient did not receive thrombolytic therapy and died 14 h after an emergency embolectomy. The authors suggest that his poor preoperative hemody-