Parachute mitral valve abnormality and bicuspid aortic valve in an asymptomatic adult patient

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Transesophageal echocardiography of a 54-year-old asymptomatic man revealed a bicuspid aortic valve (Figure 1, upper left panel) and elongated chordae converging and inserting into one of the papillary muscles. There was a redundant anterior mitral leaflet, as well as a rudimentary posterior leaflet during systole (Figure 1, upper right panel). Mitral commissural and a two-chamber view during diastole demonstrated a papillary muscle and elongated chordae, as well as a parachute-like mitral valve abnormality (Figure 1, bottom left and right panels).

Parachute mitral valve is a rare congenital cardiac anomaly in which the chordae tendinae of both leaflets of the mitral valve insert into a single papillary muscle. This is called a 'true parachute' mitral

valve, whereas the presence of two papillary muscles, with all chordae inserting into one muscle, is called a 'parachute-like' mitral valve (1). A true parachute mitral valve is usually associated with mitral stenosis and may cause symptoms early in life. Despite the presence of moderate mitral regurgitation, the asymptomatic course of our patient until adulthood may likely be explained by the absence of mitral stenosis.

REFERENCE

1. Oosthoek PW, Wenink AC, Macedo AJ, Gittenberger-de Groot AC. The parachute-like asymmetric mitral valve and its two papillary muscles. *J Thorac Cardiovasc Surg* 1997;114:9-15.

Figure 1) Transesophageal echocardiography revealing a bicuspid aortic (Ao) valve (upper left panel), a redundant anterior mitral leaflet (AML) and a rudimentary posterior leaflet during systole (upper right panel). Mitral commissural and two-chamber view during diastole demonstrating a papillary muscle, elongated chordae and a parachute-like mitral valve abnormality (lower left and lower right panels). 1 Coronary cusp; 2 Fused right and left coronary cusps; LA Left atrium; LV Left ventricle

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