A 54-year-old man was admitted to our emergency department complaining of dyspnea. His medical history was remarkable only for hypertension. On physical examination, his temperature was 36.9°C, blood pressure was 90/60 mmHg, and pulse was 105 beats/min. Cardiac auscultation revealed a mild diastolic murmur at the left parasternal border, and auscultation of the lungs revealed bilateral rales. A 12-lead electrocardiogram showed sinus tachycardia. Transthoracic echocardiography revealed a trileaflet aortic valve, severe aortic regurgitation, and a vegetation-like lesion on the non-coronary cusp (Fig. A, Video 1). Transthoracic echocardiography suggested vegetation due to endocarditis. However, transesophageal echocardiography revealed severe aortic insufficiency due to non-coronary aortic valve cusp prolapse (Fig. A and Video 2). In addition, other conditions associated with aortic insufficiency, such as aortic root dilatation or dissection, were not observed. After hemodynamic stabilization, the patient underwent successful aortic valve repair.

Figures– (A) Transthoracic echocardiography of the parasternal window revealing a vegetation-like lesion on the aortic valve. (B) Transesophageal echocardiography showing the cusp prolapse. *Supplementary video files associated with this case can be found in the online version of the journal.