An 83-year-old woman presented with left-sided hemiparesis, left central facial palsy, dysphasia and fever. She also complained of asthenia, anorexia and weight loss during the preceding weeks. On admission her body temperature was 38°C and a grade 2/6 diastolic murmur was heard at the left sternal border. Computerized tomographic scan revealed a subcortical infarction underlying the right frontal operculum. Transthoracic echocardiography was then performed, which disclosed a 12 × 4 mm aortic valve vegetation causing moderate aortic regurgitation; this vegetation prolapsed into the left ventricular outflow tract in diastole and “kissed” the ventricular surface of the anterior leaflet of the mitral valve (Fig. 1). The echocardiographic study also revealed a bilobulated 11 × 6 mm

**Figure 1.** Transthoracic echocardiography (apical view) showing a large aortic valve vegetation (blue arrow) prolapsing into the left ventricular outflow tract and kissing the ventricular aspect of the mitral valve in diastole; ALMV — anterior leaflet of the mitral valve; AV — aortic valve; LA — left atrium; LV — left ventricle; RA — right atrium; RV — right ventricle.
vegetation arising from the ventricular aspect of the anterior leaflet of the mitral valve (Fig. 2), along with mild mitral regurgitation. Three blood cultures grew Streptococcus oralis.

The patient was started on ceftriaxone and gentamicin; early surgical management was not considered due to the stroke. Unfortunately, her neurological status declined and she died a few days after admission.

Large aortic valve vegetations may prolapse into the left ventricular outflow tract and “kiss” the ventricular surface of the anterior mitral leaflet, which may also develop a vegetation [1–3]. Although rare, mitral kissing vegetations are associated with an increased risk of complications and worse outcome [2], and constitute an indication for surgery according to the European Society of Cardiology practice guidelines [4].

References