In this report, a case of left ventricular outflow tract obstruction six months following mitral valve replacement (MVR) was presented. A 40 years old male patient referred for echocardiography for his systolic murmur at aortic region six month after mitral valve replacement without doing subvalvular preservation. On echocardiography, the function of mitral metallic valve was normal; however, its ring direction was protrude into left ventricular outflow tract (LVOT) causing fix LVOT gradient with 49/29 mmHg (Figure 1). There was a flow acceleration at LVOT with Color Doppler. Because of patient’s mild effort dyspnea and moderate LVOT gradient; the patient was undertaken follow-up with medical treatment including beta blocker therapy.

In most cases of postoperative dynamic or fix LVOT obstruction after MVR, such obstruction results from the protrusion of a mechanical or bio-
prosthetic valve into the LVOT or from abnormal preserved subvalvular apparatus.\textsuperscript{1,2} If the prosthesis is not oriented properly, a strut may obstruct the outflow tract, as did presented case. Although preservation of the subvalvular apparatus during MVR preserves LV function rupture,\textsuperscript{3} it has been shown that it harbors the potential for LVOT obstruction, particularly in presence of septal hypertrophy. In presented report, the patient had a mild septal hypertrophy but no history of operative preservation technique for subvalvular apparatus. Evaluation of the LVOT and the strut position of prosthetic valve by perioperative transesophageal echocardiography or epicardial echocardiography is essential in the prevention and treatment of this complication.

\textbf{REFERENCES}

