A 74-year-old man at moderate risk for surgical aortic valve replacement underwent transcatheter aortic valve replacement (TAVR) with an Edwards S3 valve (Edwards Lifesciences, Irvine, California) via the transfemoral route. Past medical history was significant for coronary artery bypass graft surgery. Left ventricular ejection function was normal, and he was in sinus rhythm. A 26-mm valve was successfully deployed without post-dilation. Procedure time was 40 min, and activated clotting time during the procedure was 411 s. Dual antiplatelet treatment with aspirin and clopidogrel continued periprocedurally without interruption.

Immediate clinical and echocardiographic results were excellent with an aortic valve mean gradient (AVMG) of 6 mm Hg. Routine echocardiography on day 3 revealed an asymptomatic increase in AVMG to 30 mm Hg. Transesophageal echocardiography and computed tomographic (CT) imaging (Figure 1) showed restricted leaflet opening with an associated mass suspicious for thrombus (Figure 2). After multidisciplinary team discussion, a strategy of vitamin K antagonist with target INR target of 2.5, aspirin and clopidogrel was decided upon with repeat imaging at 1 month. Interval CT scan demonstrated normal valve leaflets and dissolution of the thrombus (Figures 3A and 3B), and follow-up transthoracic echocardiography showed AVMG of 11 mm Hg.

Valve thrombosis associated with TAVR is a rare occurrence with an estimated prevalence of 0.61% to 4% (1,2). There are no data to guide optimal treatment.

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strategy or duration in cases of documented valve thrombosis.

There is a growing experience from both interventional and surgical published data supporting the use of vitamin K antagonist for the management of bioprosthetic valve thrombosis (3). Although this experience relates to late valve thrombosis, we report a successful outcome in an acute setting after 1 month of anticoagulation.

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