A 32 year old male patient was admitted to our clinic with breathlessness for ten days. On his history mechanical mitral valve prosthesis implanted and tricuspid valve repaired five years ago and he was using warfarin irregularly. Blood pressure and heart rate were 105/60mmHg and 90 bpm respectively. Auscultation findings were normal except 4/6 diastolic murmur, which was heard maximally at left parasternal region. Electrocardiogram showed sinus rhythm. Transthoracic echocardiography showed normal mechanical function of mitral valve prosthesis, a ball-shaped mass that originated from the septal leaflet of the tricuspid valve and moved from the right atrium to the right ventricle with severe stenosis (Image A-C). International normalized ratio was 1.7. Recombinant streptokinase infusion at 250 000 IU in 30 minutes followed by 100 000 IU/hour during 72 hours administered. After 72 hours, echocardiography showed thrombosis resolved and there was no gradient (Image D). The patient was discharged after optimization of warfarin uneventful.

Valvular thrombosis is rare but a serious complication in patients with prosthetic valves. This case is interesting due to the formation of thrombosis of native tricuspid valve rather than the mechanical mitral valve. Possible causes the lower pressures and velocity of blood flow on right heart chamber. Additionally repaired of the tricuspid valve may have contributed to the thrombosis. Treatment of thrombosis is emergency surgery (thrombectomy or valve replacement) or thrombolysis.

Image A-B. A mobile thrombus (2.04x2.43 cm) on the tricuspid septal leaflet. Image C. Severe tricuspid stenosis due to thrombus. Image D: Thrombus was resolved after streptokinase.

REFERENCES
