

Lysis of thrombus located in the left atrial appendage.

Is it the right time for a Xa factor inhibitor?

Rozpuszczenie skrzepliny zlokalizowanej w uszku lewego przedsionka.
Czy nadszedł czas na zastosowanie inhibitora czynnika Xa?

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Standard anticoagulation treatment with vitamin K antagonists (VKA) prevents neurological complications of atrial fibrillation (AF).

However, in some patients, even with a therapeutic level of international normalised ratio (INR) > 2, the drug does not protect from thrombus formation in the left atrial appendage (LAA). Patients in whom thrombus is confirmed by transoesophageal echocardiography (TEE) should continue VKA therapy for next three weeks and have another TEE in order to exclude thrombus. New oral anticoagulants such as factor Xa or II inhibitors may be an option in this setting. However the question as to whether VKA therapy should be replaced by new oral anticoagulants when a thrombus is found in the LAA in spite of therapeutic INR has not yet been addressed.

A 70-year-old woman with CHADS2-VA2Sc score 3 and HAS-BLED score 1 was referred to our centre for AF ablation. The patient had been on full VKA therapy proven by INR examination throughout the four weeks preceding hospitalisation. In computed tomography, a LAA thrombus was suspected and TEE examination confirmed the presence of a 'soft' thrombus in the LAA (Fig. 1A) which was further confirmed by intracardiac echocardiography (Fig. 1C). The AF ablation was postponed. Rivaroxaban was started for four weeks. Subsequent TEE excluded a thrombus in the LAA (Fig. 1B). This case report suggests that Xa inhibitor may be a valuable option for dissolving a thrombus when VKA therapy does not work. Further studies are warranted.



Figure 1. **A.** Transoesophageal echocardiography; thrombus in left atrial appendage (LAA; arrow); **B.** Transoesophageal echocardiography after four weeks of treatment with rivaroxaban; LAA with no signs of thrombus; **C.** Intracardiac echocardiography probe located in the left pulmonary artery; thrombus in LAA

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