Large protruding thrombus over left atrial appendage occlusion device successfully treated with apixaban

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This was a 61-year-old male patient with permanent non-valvular atrial fibrillation (NVAF) and CHA2DS2VASc of 5 with a relative contraindication to oral anti-coagulation (OAC) for previous intracranial haemorrhage. Left atrial appendage occlusion (LAAO) was successfully conducted with implantation of a 25-mm Amplatzer Amulet. Patient was discharged with aspirin and clopidogrel. At 3 months, trans-oesophageal echocardiography (TEE) did not show device thrombosis and clopidogrel was therefore discontinued. At 9 months, a control TEE exhibited a 25 × 23 × 1.3 mm protruding and mobile device thrombus (Panels A and B). In our opinion, the two most plausible explanations for the thrombus formation were the doubtful treatment compliance of the patient and the presence of spontaneous echo-contrast in the left atrium. The patient was treated with apixaban 5 mg/12 h for 6 months with progressive thrombus resolution and no clinical events (Panels C and D). Considering the risk of intracranial bleeding, apixaban was stopped and aspirin was restarted again without further complications. To the best of our knowledge, this is the first report of an LAAO device thrombosis successfully treated with apixaban. Since apixaban has shown a good balance among efficacy for stroke prevention and safety for bleeding events in previous reports, this alternative might be a very valid temporary option to prevent or manage device thrombosis in patients with contraindication to conventional OAC.

2D (Panel A) and 3D (Panel B; Supplementary material online, Video S1) TEE image of the protruding thrombus attached to the LAA occlusion device. Two-dimensional TEE image of the partially and completely thrombus resolution after 3 months (Panel C) and 6 months (Panel D) therapy with apixaban, respectively.

Supplementary material is available at European Heart Journal online.