A patient with acute ST-segment elevation myocardial infarction (STEMI), caused by complete thrombotic occlusion of the right coronary artery (A), underwent aspiration thrombectomy (B), but optical coherence tomography revealed persistent thrombus protruding into the lumen (C, D). A 3.0 × 24 mm MGuard (InspireMD, Tel Aviv, Israel) mesh-covered stent was deployed and resulted in improvement in the angiographic appearance (E). Optical coherence tomography demonstrated the mesh covering of the stent (F) and the presence of thrombus “trapped” behind the mesh (G).

Distal embolization of thrombus during percutaneous intervention is a cause of periprocedural complications ranging from mild elevations in cardiac biomarkers to STEMI. We present a case of STEMI in which thrombus remained after aspiration thrombectomy, and embolization was prevented by the implantation of a novel mesh-covered stent.