Unusual presentation of endocarditis as inferior STEMI

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A 70-year-old man presented with inferior STEMI. Coronary angiography showed an occluded circumflex artery (Cx) (Panel A, Supplementary material, Video S1). The post-thrombectomy TIMI 3 flow was established instantly (Panel B, Supplementary material, Video S2). There was no evidence of an underlying stenotic atheromatous plaque, raising possibility of an embolic phenomenon. He gave a 3-week history of malaise, generalized arthralgia, progressive loss of vision, and pain in the right eye and alexia. There were features of right eye panophthalmitis (Panel D). Blood cultures were positive for beta-haemolytic Streptococcus group G. Transoesophageal echocardiography (TOE) showed a large vegetation on the mitral valve (Panel C, Supplementary material, Video S3). MRI of the brain demonstrated a left temporal lobe abscess. He was treated with gentamicin and benzyl penicillin and recovered gradually but was left with a permanent loss of vision in the right eye. He had no further embolic events.

Endocarditis is a condition with multi-organ involvement. Eye complications, however, are rare as is embolic STEMI presentation, especially in relation to the circumflex artery. We believe this is to be the first reported case of infective endocarditis with concomitant initial presentation of acute MI and acute panophthalmitis. This unusual cause of myocardial infarction was fortunately treated by primary PCI using a thrombectomy catheter. Prompt removal of occlusive material limited myocardial damage (peak total creatine kinase 975 IU/L, troponin I >50.00 ng/L).

Panels A–D. (A) Supplementary material, Video S1: coronary angiography (9 degree right anterior oblique, posterior anterior caudal 31 degree view): occluded Cx (TIMI 0 flow). (B) Supplementary material, Video S2: coronary angiography (posterior anterior, 29 degree caudal view): re-perfused Cx post-thrombectomy (TIMI 3 flow). There is no evidence of underlying stenosis. (C) Supplementary material, Video S3: TOE (mid-oesophageal four-chamber view): vegetation on anterior mitral valve leaflet. (D) Right eye panophthalmitis with visible fluid level (pus).

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Supplementary material is available at European Heart Journal online.