

12. Brignole M, Auricchio A, Baron-Esquivias G, Bordachar P, Boriani G, Breithardt OA, Cleland J, Deharo JC, Delgado V, Elliott PM, Gorenek B, Israel CW, Leclercq C, Linde C, Mont L, Padeletti L, Sutton R, Vardas PE ESC Committee for Practice Guidelines (CPG), Zamorano JL, Achenbach S, Baumgartner H, Bax JJ, Bueno H, Dean V, Deaton C, Erol C, Fagard R, Ferrari R, Hasdai D, Hoes AW, Kirchhof P, Knuuti J, Kohl P, Lancellotti P, Linhart A, Nihoyannopoulos P, Piepoli MF, Ponikowski P, Sirnes PA, Tamargo JL, Tendera M, Torbicki A, Wijns W, Windecker S. Document Reviewers, Kirchhof P, Blomstrom-Lundqvist C, Badano LP, Aliyev F, Bänsch D, Baumgartner H, Bsata W, Buser P, Charron P, Daubert JC, Dobreau D, Faerstrand S, Hasdai D, Hoes AW, Le Heuzey JY, Mavrikis H, McDonagh T, Merino JL, Nawar MM, Nielsen JC, Pieske B, Poposka L, Ruschitzka F, Tendera M, Van Gelder IC, Wilson CM. 2013 ESC Guidelines on cardiac pacing and cardiac resynchronization therapy: the Task Force on cardiac pacing and resynchronization therapy of the European Society of Cardiology (ESC). Developed in collaboration with the European Heart Rhythm Association (EHRA). *Eur Heart J* 2013;34:2281–2329.
13. Berlit P, Deuschl G, Elger C, Gold R, Hacke W, Hufschmidt A, Mattle H, Meier U, Oertel WH, Reichmann H, Schmutzhard E, Wallesch C-W, Weller M, Hans-Christoph Diener, Christian Weimar (Hrsg). *Leitlinien für Diagnostik und Therapie in der Neurologie*. Herausgegeben von der Kommission Leitlinien der Deutschen Gesellschaft für Neurologie. Thieme Verlag: Stuttgart; 2012.

CARDIOVASCULAR FLASHLIGHT

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Left ventricular free wall rupture contained by an apical pseudo-aneurysm

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A 76-year-old male patient was admitted for exertional shortness of breath for the last month. Physical examination showed bipulmonary hyperventilation and fine crackles. The electrocardiogram was compatible with sequelae of anterior myocardial infarction, with borderline troponin-T levels, and no elevation of creatinine-kinase. Trans-thoracic echocardiography confirmed a large anterior myocardial infarction with a dilated left ventricle (LV) and a large antero-septo-apical akinnesia, connected with an apical pseudo-aneurysm (asterisk) (Panels A and B) through an apical free wall rupture (arrow) (Panels A and B). Left ventricle ejection fraction (EF) was 20–25% with a preserved right ventricular function. Computed-tomographic angiography confirmed an LV apical aneurysmal dilatation connected through an apical rupture (arrow) with a pseudo-aneurysm (asterisk) (Panels D and E). His coronary angiography showed single vessel disease with total occlusion of the proximal left anterior descending coronary artery without patent distal lumen (arrow) (Panel C).

The patient underwent urgent open heart surgery. After opening the chest, it was observed that the LV was dilated with a free wall rupture (dotted arrow) of the apex, which was contained by a pseudo-aneurysm formation (solid arrow) (Panel G). The Dor technique was used for endo-exclusion of the aneurysm by a patch (arrow) (Panel H) and closure of the LV apical free wall rupture (arrows) (Panel I). Intra-operative transoesophageal echocardiography showed normal LV size without intra-cavitary thrombus, and the excluded apical aneurysm (asterisk) by endopatch (arrow) (Panel F). His exercise capacity increased within 6 months after surgery, with an LVEF of 40%.

