

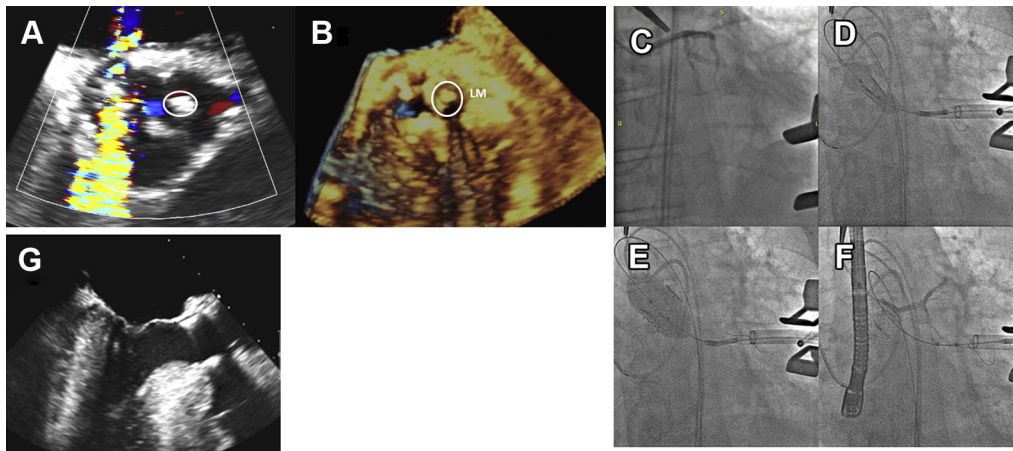
IMAGES IN CARDIOLOGY

Left Main Coronary Artery Protection During Transcatheter Aortic Valve Deployment



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A 68-year-old man with severe senile calcific aortic valve stenosis was being prepared for transcatheter aortic valve implantation. Intraoperative transesophageal echocardiogram demonstrated a 5×5 mm calcified mobile echodensity, immediately adjacent to the orifice of the left main (LM) coronary artery (A, B). A BMW wire (Abbott Vascular, Santa Clara, California) (C) was prophylactically placed down the circumflex artery territory, and the upstream left main balloon was temporarily inflated to protect the vessel during both valvuloplasty and deployment of the 26-mm Edwards Sapien valve (Edwards Lifesciences, Irvine, California) (D, E). Post-procedural selective coronary angiography confirmed normal blood flow down the left main coronary artery and branch vessels (F), and echocardiography confirmed the absence of perivalvular or transvalvular leak (G). The risk of distal coronary artery embolization is increased in the presence of bulky cusps and mobile debris. Temporary balloon occlusion is a safe and effective method of coronary protection (1).

REFERENCE

1. Webb JG, Chandavimol M, Thompson CR, et al. Percutaneous aortic valve implantation retrograde from the femoral artery. *Circulation* 2006;113:842–50.