- 23 **Schneider MBE**, Zartner PA, Magee AG. Transseptal approach in children after patch occlusion of atrial septal defect: first experience with the cutting balloon. *Catheter Cardiovasc Interv* 1999;**48**:378-81.
- 24 **Inoue T**, Sakai Y, Hoshi K, et al. Lower expression of neutrophil adhesion molecule indicates less vessel wall injury and might explain lower restenosis rate after cutting balloon angioplasty. *Circulation* 1998;**97**:2511-8.
- 25 **Barath P**, Fishbein MC, Vari S, et al. Cutting balloon: a novel approach to percutaneous angioplasty. *Am J Cardiol* 1991;**68**:1249-52.
- 26 **Sousa JE**, Costa MA, Abizaid AC, et al. Sustained suppression of neointimal proliferation by sirolimus-eluting stents: one-year angiographic and intravascular ultrasound follow-up. *Circulation* 2001;**104**:2007-11.
- 27 **Degertekin M**, Serruys PW, Foley DP, et al. Persistent inhibition of neointimal hyperplasia after sirolimus-eluting stent implantation: long-term (up to 2 years) clinical, angiographic, and intravascular ultrasound follow-up. *Circulation* 2002;**106**:1610-3.

IMAGES IN CARDIOLOGY

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Obstructed left coronary cusp as a cause of left main coronary artery obstruction and severe aortic regurgitation

Left main coronary artery disease (LMCD) is mainly caused by atherosclerotic stenosis. However, obstructed left coronary cusp (LCC) can be a cause of LMCD as well as a cause of severe aortic regurgitation rarely.

A 62 year old woman with symptomatic severe aortic regurgitation was referred for aortic valve replacement. Preoperative coronary angiography (panel A) showed anomalous connection from the right coronary artery (RCA) to the proximal part of the left anterior descending coronary artery (LAD) with aneurysmal dilatation of the left main coronary artery (LMCA), which was separated from the aorta. The 16 slice computed tomography (Sensation 16, Siemens Medical System, Germany) with contrast agent (iodixanol) revealed

an LMCA aneurysm separated distinctly from the aortic sinus (panel B). The aortic valve was composed of three cusps. However, the LCC was hypoplastic and fused to the aortic wall on the operative finding (panels C and D). The left aortic sinus was reconstructed after incision of the LCC. The patient underwent aortic valve replacement with 21 mm On-X valve (Medical Research Carbon Institute, Texas, USA) and was discharged without complication.

J-H Park
Y H Seo
K S Kim

kskim@chonbuk.ac.kr

(A) Coronary angiography in left anterior oblique 45° and caudal 30° projection shows the aneurysmal dilatation (*) of the left main coronary artery (LMCA). 1, anomalous connection from the right coronary artery to the left anterior descending coronary artery (LAD); 2, LAD; 3, left circumflex artery and aorta (Ao). (B) Curved multiplanar reformation along the left coronary artery via 16 slice computed tomography demonstrates the LMCA aneurysm (*). Operative findings show a hypoplastic left coronary cusp with fusion to the aortic wall (C, D).