

Management of left main coronary artery stenosis: Utility of intravenous ultrasonography and multi-detector computed tomographic coronary angiography in clinical practice

Sol ana koroner arter stenozu yönetiminde intravasküler ultrasonografi ve multidedektör bilgisayarlı tomografik koroner anjiyografinin klinik kullanımındaki yeri

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To the Editor;

We read with great interest the article by Kaya et al¹ on the management of mobile left main coronary artery (LMCA) thrombus. They used intracoronary streptokinase for thrombus and referred patient for elective cardiac surgery due to suspected significant ostial stenosis of LMCA.

Patients with acute coronary syndromes are increasingly treated with an early invasive strategy. Preventing unnecessary angioplasties related to overestimation is particularly important especially in patients presenting with their first coronary event.²

Vasospasm of the left main coronary artery is a very rare, sometimes life-threatening cardiovascular event, which may be caused by spontaneous coronary spasm or caused by an iatrogenic component.

Plaque characteristics and distribution, severity and extent of calcification, arterial remodeling and the presence of dissection or thrombi can affect the decision to use a particular treatment before intervention. Clear identification of the characteristics of culprit plaques and vessels can help to improve clinical outcomes after interventions.

Although having higher costs, experienced operator-guided intravascular ultrasound (IVUS) is a useful diagnostic tool for the assessment of le-

Anahtar kelimeler: Koroner trombüs, akut koroner sendrom, IVUS, MDCT-CA

sion severity leading to revascularization, selection of the revascularization strategy and assessment of lesion composition leading to a change in interventional strategy.³⁻⁵

In this case, LMCA stenosis was eliminated by only nitrat infusion. IVUS and/or multi-detector computed tomographic coronary angiography could have contributed to reaching a decision for non-surgery as it confirmed the absence of significant atheromatous substrate, patency and unobstructed flow in the lumen. Later repeat angiography may have shown normal coronary arteries.

In conclusion, IVUS at the time of angiography may help to differentiate minimal atherosclerotic disease suggesting vasospasm and may provide an optimal solution saving patients from angioplasty or surgery and their related medications and expected complications. Alternatively, noninvasive testing, such as computed tomography angiography, may diagnose isolated LMCA spasm without a significant atherosclerotic lesion in these patients prior to CABG surgery.

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