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doi: 10.1136/hrt.2006.100982

Exertional dyspnoea due to spontaneous coronary artery dissection in a 55-year-old man

A 55 year-old man with history of hypertension, type 2 diabetes mellitus, hyperlipidaemia, and a remote history of methamphetamine use (>20 years before presentation) presented with a 2-year history of exertional dyspnoea. An adenosine thallium test showed a large area of anterior ischaemia. Diagnostic coronary angiography showed spontaneous coronary dissection originating in the ostium of the left anterior descending artery (arrows, panel A) and extending into the proximal left anterior descending and first diagonal arteries (arrowheads, panel A). Intravascular ultrasonography demonstrated multiple filling defects within the artery (panel B) with flow between the defects (panel

C). He underwent successful coronary artery bypass surgery anastomosing the left internal mammary artery to the left anterior descending artery and a vein graft to the first diagonal branch. Postoperatively the exertional dyspnoea resolved.

Spontaneous coronary artery dissection (SCAD) is a rare condition of unknown cause. Most patients are young (mean age 40 years in one series), and do not have traditional coronary artery disease risk factors. SCAD is most commonly found in women, especially in the peripartum period, and with oral contraceptive use. SCAD has been associated with cocaine use, Marfan syndrome and strenuous exercise. Patients with SCAD usually present with an acute coronary syndrome

or the diagnosis is often made at necropsy. It results from lumen compression by subadventitial haematomas with rare instances of intimal tear. Prompt diagnosis and revascularisation may improve survival; however, the optimal management approach is debated. SCAD was an unexpected finding in our patient in view of his age, gender and because he had multiple coronary artery disease risk factors.

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Funding: ES Brilakis is supported by the Clark R Gregg Fund, Harris Methodist Health Foundation 6100 Western Place, Suite 1001, Fort Worth, TX 76107, USA, and by a Veterans Affairs VISN 17 startup award, Waco, Texas, USA