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IMAGES IN CARDIOLOGY

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Corkscrew appearance in the right coronary artery in a patient with Buerger's disease

A 44 year old man with suspected coronary artery disease was admitted to our hospital. He had been diagnosed with Buerger's disease, and both his legs had been amputated at the age of 30. Although the patient had no coronary risk factors except cigarette smoking and no history of chest pain, an admission ECG showed abnormal Q waves in leads II, III, and aVF and inverted T waves in leads III and aVF. Echocardiography revealed slight hypokinesis in the inferior wall of the left ventricle. Cardiac catheterisation was performed via the right brachial artery. A left coronary arteriogram revealed the normal left coronary system with collateral circulation to the distal right coronary artery (panel A). A right coronary arteriogram showed a 99% stenosis with delay in the distal portion of the artery and a "corkscrew appearance" from the origin of the artery until the mid-portion of it (panel B). A left ventriculogram revealed slight hypokinesis in the inferior wall with an ejection fraction of 70%. An aortogram showed the intact thoracic aorta including its major branches.

Coronary arteriograms. (A) The left coronary arteriogram shows an intact left coronary system and collateral circulation to the right coronary artery (arrow). (B) The right coronary arteriogram shows a stenotic lesion with a "corkscrew appearance".

The corkscrew appearance observed in our case has not been previously reported in Buerger's disease. Further investigations are desirable to clarify the pathogenesis of this unique appearance.

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