SOFT-TISSUE IMAGES. BILATERAL LARGE ILIAC ARTERY ANEURYSMS

A 78-year-old man who had a history of coronary artery bypass grafting, insertion of a pacemaker, unstable angina and an ejection fraction of 0.26 was found to have a pulsatile mass on routine rectal examination. Iliac artery aneurysm was suspected.

Preoperatively, a 3-dimensional reconstructed image (Fig. 1A) showed an aneurysm of the left common iliac artery, 7-cm in largest diameter, and another aneurysm of the right internal iliac artery, 4.5 cm in largest diameter. Angiography (Fig. 1B) showed a large left common iliac artery and a patent inferior mesenteric artery (arrow).

Through a right groin incision, an aorto-uniliac endovascular stent graft (Fig. 1C) was placed (arrow) with femorofemoral bypass grafting (Fig. 1D, arrow) and ligation of the left common iliac artery.

Postoperatively, the 3-dimensional reconstructed image (Fig. 1E) showed the stent graft and no extravasation of contrast medium, confirming bilateral exclusion of the aneurysm.

Atherosclerotic aneurysms of the iliac arteries are relatively rare. They can be asymptomatic, accounting for 2% to 7% of aneurysms of the aortoiliac segment. They can be complicated by rupture, embolization and thrombosis or they can produce symptoms by pressure on adjacent structures. Death rates after emergency surgery for rupture of iliac artery aneurysms has been reported to be as high as 33%. The difficulties encountered during the repair of these lesions, particularly in patients who have undergone previous aortic reconstruction, have encouraged the development of alternative therapies, including proximal and distal aneurysm ligation, embolization with coils and the insertion of endovascular stent graft devices. Large aneurysms like the one here are particularly difficult to manage.