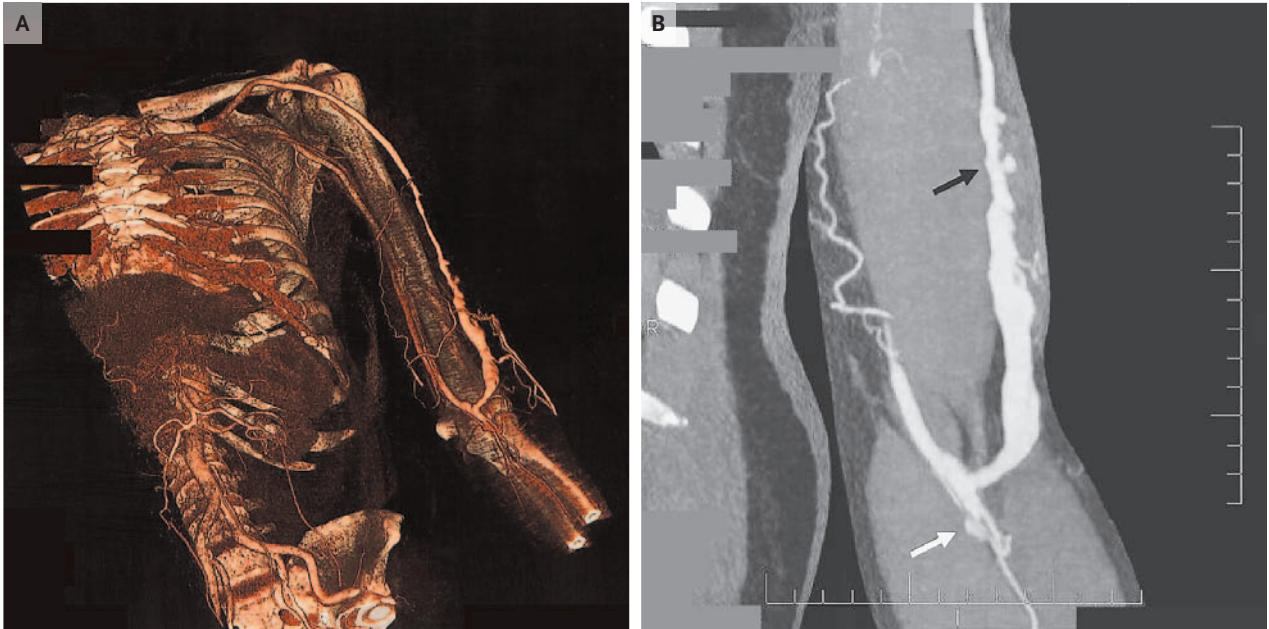


IMAGES IN CLINICAL MEDICINE

Arteriovenous Fistula on CT Angiography



A 62-YEAR-OLD MAN WITH DIABETES AND END-STAGE RENAL DISEASE, FOR which an arteriovenous fistula had been placed in the left arm 11 months earlier for hemodialysis, presented with a possible stenosis of the fistula, given increased pressure in the fistula and poor flow during hemodialysis. Computed tomography (CT) of the fistula showed multiple stenoses in the venous outflow vessels (Panel A, three-dimensional reconstruction of coronal image). Typically, when a stenosis is suspected, opacification by direct puncture angiography remains the imaging method of reference. With the emergence of multislice CT, this less invasive imaging method (which requires the injection of approximately 80 ml of contrast material into the contralateral arm) can demonstrate the anastomotic site in the central veins (Panel B, white arrow) and detect important lesions (black arrow). The patient's stenoses were treated with percutaneous transluminal angioplasty, with subsequent improvement in the function of the arteriovenous fistula.

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