Intimal angiosarcoma of the descending aorta as an unusual cause of severe upper extremity hypertension

A 49 year old man presented with epigastric and back pain. The patient complained of intermittent paraesthesia of both the lower extremities and a four month history of fatigue, weight loss, and headache. On physical examination the blood pressure at the upper extremities was 210/160 mm Hg, and at the lower extremities was 130/70 mm Hg. Computed tomography (CT) was performed to evaluate the possible cause of the upper extremity hypertension. The CT scan revealed a lobulated intraluminal mass at the descending thoracic aorta with near total obstruction. Aortography by magnetic resonance imaging revealed a filling defect in the proximal thoracic aorta (panel A). In T1 weighted image, the mass had a signal intensity similar to muscle tissue and mild peripheral enhancement after gadolinium injection indicative of malignant tumour. At surgery, there were multiple lobulated and fungating masses with a yellowish and necrotic surface. It was firmly adhered to the inner surface of aortic wall (panel B). Vascular reconstruction was performed with a 24 mm Dacron aortic prosthesis. After mass excision the blood pressure at the upper extremities had decreased to 140/90 mm Hg. Microscopic findings revealed a high grade, poorly differentiated, malignant angiosarcoma that involved only the intimal surface of the aorta (panel C). The postoperative course was uneventful. Fourteen months later, the patient died of profound cachexia, with clinical evidence of generalised metastasis.