PHOTO QUIZ

Just an open book?

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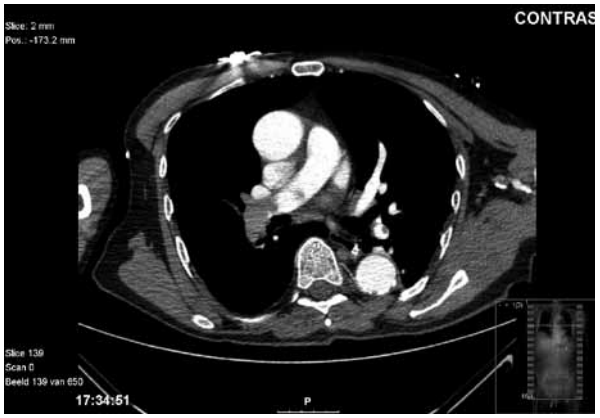
CASE REPORT

A 68-year-old man was admitted to our hospital with an open-book pelvic fracture. He was injured when he fell off a horse two days earlier. His medical history revealed hypertension. The day after admission he developed a left-sided hemiparalysis and aphasia. The diagnosis cerebrovascular accident (CVA) was suspected. A computed tomography of the brain showed a media infarction in the right frontotemporal regon and no haemorrhage. Treatment with thrombocyte aggregation inhibitors was started. No thrombolysis was given, because of the risk of haemorrhage from the pelvic region. The duplex of the carotid arteries showed no significant stenosis. In the following days he made a full neurological recovery. On day 13 of admission the patient had an acute drop in consciousness on the ward. The patient was unresponsive and hypoxic with a saturation of 73% but haemodynamically stable. His pupils were unresponsive and dilated for a short period. His right arm felt cold. He was intubated, after which a computed tomography of the brain showed no new CVA or haemorrhage. The computed tomography of the thorax and abdomen revealed filling defects in the left femoral vein, pulmonary arteries (*figure 1*), aorta descendens and renal arteries. There was little perfusion of the kidneys.

WHAT IS YOUR DIAGNOSIS?

See page 375 for the answer to this photo quiz.

Figure 1. *Filling defects in the pulmonary arteries*



ANSWER TO PHOTO QUIZ (PAGE 371)

JUST AN OPEN BOOK?

DIAGNOSIS

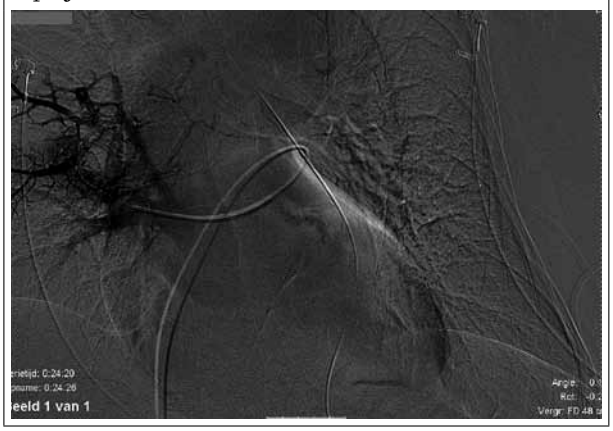
The diagnosis of deep venous thrombosis with multiple embolisms in the pulmonary and renal arteries and aorta descendens was made. A patent foramen ovale was suspected. Echocardiography revealed high right ventricle pressures and a leftward shift of the septum, a patent foramen ovale was suspected but not proven. Thrombolysis was given because the patient had an increasing hypoxaemia despite maximal oxygen supply and ventilatory support. This improved the perfusion of his arm, but the saturation difficulties remained. Although haemodynamic support through fluid therapy and vasopressors was started the haemodynamic situation deteriorated. A fragmentation of the thrombus in the pulmonary arteries through femoral vein catherisation was performed. The diagnosis of patent foramen ovale was confirmed when the catheter for fragmentation reached the left atrium (*figure 2*). After the procedure the oxygen saturation improved and inotropic support was reduced. Because of the renal failure the patient required continuous haemofiltration for seven days.

Unfortunately after cessation of sedation the patient remained unresponsive. A computed tomography of the brain was made which showed extensive ischaemic regions in the left and right hemisphere, probably due to multiple embolisms to the brain. This was not considered to be compatible with a reasonable quality of life.

The family was informed after which the joint decision was made to cease respiratory support. The patient died shortly after.

A patent foramen ovale is a common condition and has a prevalence of 15 to 25%.[1-3] This may be a case any doctor can encounter in his career and thus should be aware of. In retrospect, in the work up of the initial stroke a foramen ovale should have been suspected, but in this case it was not. The echocardiogram could not determine the foramen ovale, even when the patient had clinical signs of a considerable shunt through the foramen ovale. Early recognition in patients with arterial thrombosis (e.g. a stroke) is essential to prevent further possibly devastating clinical deterioration.

Figure 2. *Catheter for fragmentation reached though the left atrium the pulmonary arteries and an angiography is performed*



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