SAJS

Case Report

Simultaneous blunt traumatic laceration of inferior vena cava and right renal artery – computed tomographic diagnosis

SANDEEP GOPAL JAKHERE, M.D., D.N.B.
HIMANSHU VASUDEO BHARAMBAY, M.B. B.S.
Department of Radiology, B. Y. L. Nair Charitable Hospital and Topiwala National Medical College, Mumbai, India

Case discussion

A 30-year-old man who had been involved in a road traffic accident underwent a computed tomography (CT) scan at the B. Y. L. Nair Charitable Hospital, Mumbai, to rule out an intraperitoneal haemorrhage in view of a persistently low haemoglobin concentration of 8.5 g/dl. The CT scan showed a liver laceration reaching up to the liver capsule and haemoperitoneum. There was a laceration of the retrohepatic portion of the inferior vena cava (IVC) with intraluminal thrombosis (Fig. 1). The right kidney did not show any enhancement on the arterial and venous phase (Fig. 2). The right renal artery also showed abrupt cut-off just distal to its origin. The patient was managed conservatively as he was haemodynamically stable.

Injury to the IVC due to blunt abdominal trauma is uncommon, with only a few published reports in the literature.[1] Simultaneous laceration of the IVC and the right renal artery is a catastrophic situation and can present a tough dilemma to the surgeon.

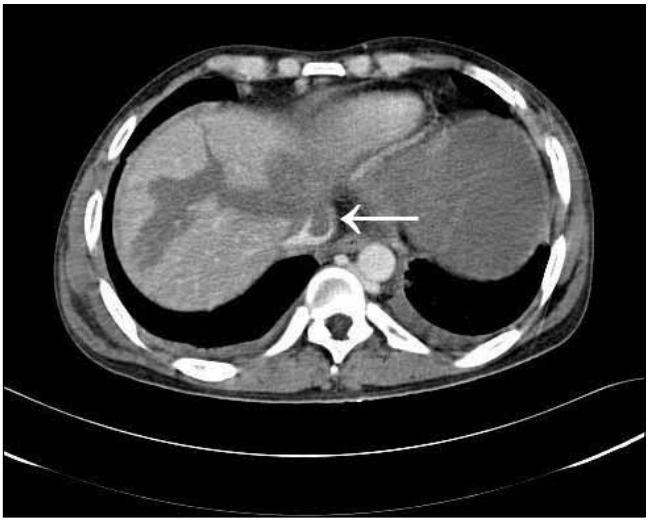

Fig. 1. Contrast-enhanced CT scan through the upper abdomen shows laceration of the anterior wall of the IVC with intraluminal thrombosis (arrow).

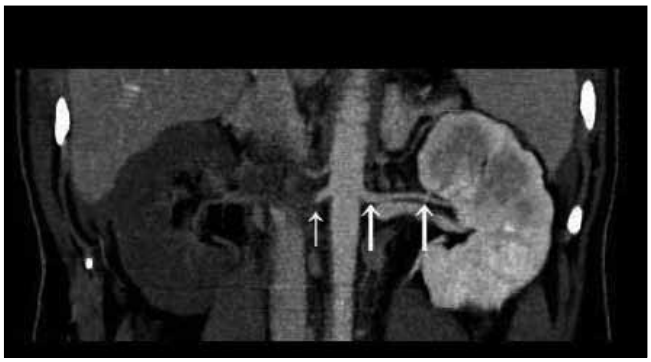

Fig. 2. Coronal CT image shows abrupt cut-off of the right renal artery (single small arrow). The left renal artery is normal in calibre and shows good contrast opacification (thick double arrows).

REFERENCE

1. Netto FA, Tien H, Hamilton P, et al. Diagnosis and outcome of blunt caval injuries in the modern trauma center. J Trauma 2006;61(5):1053-1057.