Clinical picture

An uncommon cause of heart failure

This 64-year-old woman with a background of hereditary haemorrhagic telangiectasia (HHT) presented with increasing dyspnoea over a few months. A chest radiograph (a) showed a right-sided pleural effusion, which was drained and found to be a transudate. A CT scan revealed multiple large hepatic arteriovenous malformations (AVM) (b). An echocardiogram demonstrated normal ventricular function. Haemoglobin and serum albumin were normal. Liver function tests revealed a cholestatic picture.

High-output cardiac failure is a recognized complication of HHT. It results from the hyperdynamic circulation induced by left-to-right shunting through AVMs, in this case hepatic. Arteriovenous malformations are seen in 8–31% of cases, and can also lead to portal hypertension and biliary obstruction. Treatment is generally conservative unless the liver disease becomes severe enough for liver transplantation to be considered. Arterial embolization has been advocated as a treatment, but recent experience suggests this can lead to severe hepatic necrosis.

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