its use (Mikisch_et al, 2001; Flanigan et al, 2004). More specific to this case, the effects of neoadjuvant therapy with tyrosine kinase inhibitors in patients undergoing inferior cava thrombectomy (before nephrectomy) show some benefit to the primary tumour, but limited effects on the tumour thrombus itself (Bigot et al, 2014). A further unusual feature of renal cell carcinoma is the potential for regression of metastases (pulmonary, brain, skeletal and lymphoid) following nephrectomy, radiation or embolization of the primary tumour (Lokich, 1997).

Renal cell carcinoma is a somewhat unusual cancer in its often incidental discovery, behaviour both in terms of 'dissemination' beyond the primary, treatment options and responses. The disseminated metastases in this patient prevented a surgical option that might have been considered with contiguous tumour extension alone. **BJHM**

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LEARNING POINTS

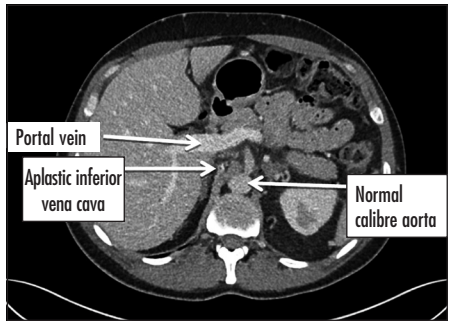
- Up to 70% of all renal cancers are incidental findings on imaging performed for unrelated reasons.
- The classical teaching that renal cell carcinoma presents with haematuria, pain or a palpable mass is more the exception than the rule.
- Renal cell carcinoma can be asymptomatic for many years.
- Non-metastatic renal cell carcinoma with inferior vena cava and right atrial invasion can be surgically treated with good prognosis.
- Metastatic renal cell carcinoma and age >70 years is associated with a poor outcome.

Absent inferior vena cava: an unusual cause of recurrent deep vein thrombosis

A 42-year-old Caucasian man with a history of right leg deep vein thrombosis a year earlier, presented with a painful, swollen left leg. There were no obvious risk factors. Doppler confirmed extensive left femoral vein deep vein thrombosis. Abdominopelvic ultrasound showed no abnormalities. Protein C, protein S, antithrombin 3, factor V Leiden and JAK-2 mutation were normal.

Computed tomography of the thorax, abdomen and pelvis showed the deep vein thrombosis extending into the left iliac veins. The scan also showed complete absence of the inferior vena cava (*Figure 1*), and extensive collaterals. The liver, heart, spleen, pancreas and kidneys were unremarkable. The patient was started on lifelong warfarin.

Figure 1. Computed tomography showing aplasia of the inferior vena cava.



Absent inferior vena cava is an uncommon cause of deep vein thrombosis (Gayer et al, 2003). Complete or partial absence and bilateral inferior vena cava are recognized. The pathogenesis is unclear (Iqbal and Nagaraj, 2008). Chronic venous leg changes, ulcerations, varicose veins and collateral veins in the lower trunk or abdomen point to the diagnosis. Contrast computed tomography or magnetic resonance imaging is essential for diagnosis. The management is long-term anticoagulation in most cases. Surgery is rarely indicated. **BJHM**

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