Late metastases to the pancreas from resected renal cell carcinoma masquerading Multiple Endocrine Neoplasia

D Tatovic1, D Farrugia2, F Jewell3, T Ulahanna1
1 Department of Endocrinology & Diabetes, Gloucestershire Royal Hospital, Gloucester, UK
2 Department of Oncology, Cheltenham General Hospital, Cheltenham, UK
3 Department of Radiology, Gloucestershire Royal Hospital Gloucester UK

A fifty eight year old gentleman presented with hematuria. Investigation revealed a tumour of the lower pole of the right kidney. He underwent a nephrectomy and the tumour was staged as PT 3B NO MX clear cell carcinoma involving the renal vein, but not breaching the capsule.

Four years after his initial presentation, he was found to have hypercalcemia with raised parathyroid hormone and positive Sestamibi scan. Parathyroidectomy confirmed a parathyroid adenoma. At the same time, abdominal and chest CT scans showed two lesions in the body of the pancreas. Gut hormone profile was negative. However, it was suspected that patient could have MEN 1 syndrome. This assumption was supported by endoscopic ultrasound and fine needle aspiration of pancreatic masses, which showed atypical epithelial cells, suggestive of neuroendocrine lesions. In addition MRI showed a cystic lesion in the pituitary.

Watchful waiting of hormonally inactive pancreatic nodules in MEN1 is an acceptable strategy. CT scan four months later showed at least ten lesions in the pancreas but no change elsewhere. At that stage, it was felt that total pancreatectomy was the most appropriate management. Histology revealed 15 tumours in the pancreatic parenchyma all of which were metastatic deposits of clear cell carcinoma with features fully consistent with the kidney as the primary site. Genetic testing for MEN 1 subsequently came as negative.

Differential diagnosis of pancreatic masses in this particular patient was challenging. Multiple pancreatic lesions in a patient with known primary tumour are suggestive of metastatic spread, although renal cell cancer rarely metastasises to the pancreas. On the other hand, the presence of a functional parathyroid adenoma and pancreatic lesions raise possibility of MEN 1.

Endoscopic ultrasound and FNA are known to be useful procedure in establishing the origin of pancreatic lesions. Differentiating between clear cell neuroendocrine tumour of the pancreas and renal cell carcinoma can be problematic and would require an adequate tissue sample through biopsy for immunocytochemical analysis.