

Case	Age	Sex	Specimen	Macroscopic	Information	Immuno	LINKS	Diagnosis
1	43	Female	Kidney	Partial nephrectomy specimen containing a well defined mass (50 x 50 x 40mm). On sectioning, the mass is soft with whitish nodules and areas of haemorrhage.	? RCC, left kidney	The lesional cells express Cam 5.2, CK7, PAX-8, vimentin and focal EMA. There is negative staining for 34BE12 and CD10	<a href="#">CASE 1</a>	Mucinous tubular and spindle cell carcinoma
2	44	Female	Left Kidney	Well defined cystic lesion involving the lower 2/3 of kidney, containing clear serous fluid, measuring 13 x 10 x 6 cm. No solid areas.	?left cystic renal cancer	N/A	<a href="#">CASE 2</a>	Cystic nephroma, Mixed epithelial and stromal tumour
3	31	Male	Left nephrectomy	Atrophic and scarred kidney with multiple cysts, 5-35mm in size. Within the largest cyst was a solid lesion, 18mm, which is represented on submitted section.	End stage renal failure on dialysis. Acquired cystic kidney disease and had been followed up. On last scan a more solid lesion was seen.	None	<a href="#">CASE 3</a>	Renal cell carcinoma - Acquired cystic disease associated RCC
4	73	Female	Left open radical nephrectomy for renal mass	Left kidney: A kidney measuring 20cm superior to inferior x15cm medial to lateral x 14cm anterior to posterior. There is a segment of ureter measuring 6x0.5cm. There is tumour measuring 15x11x9cm, involving most of the kidney, which appears to be confined to the kidney. Large areas are necrotic. There is no macroscopic involvement of the renal vein.	Left open radical nephrectomy + hilar nodes. Appendicectomy. Had pelvic collection.	tumour is diffusely positive for WT1, CD57 and PAX8 with scattered focal positivity for CD56 (NCAM). EMA shows only extremely scanty focal positivity at one edge of the lesion but is negative elsewhere. CK7, racemase (AMACR), TTF-1 and CAIX are negative.	<a href="#">CASE 4</a>	Metanephric adenoma
5	35	Male	Right partial nephrectomy.	26g partial nephrectomy 50 x 40 x 23mm with well circumscribed tumour 26mm in maximum diameter.	Tumour upper pole of right kidney.	CD10, RCC. CAM5.2, CK7 and AE1/3 negative.	<a href="#">CASE 5</a>	Renal cell carcinoma - MiT Family Translocation RCC (Xp11, t[6;11])

6	54	Male	Kidney	Red-brown circumscribed tumor in the kidney	54 year-old man with concurrent resection of renal mass and para-aortic paraganglioma	Minimal staining for EMA, negative vimentin, negative KIT, positive PAX8	<a href="#">CASE 6</a>	Renal cell carcinoma - Succinate dehydrogenase-deficient RCC
7	70	Female	Kidney	3cm tumour in kidney	70-year-old female, Tumor of the right kidney 3 cm, mostly whitish, firm. No other tumors (CT, PET CT). The patient is alive and well 3 years after diagnosis.	positive stains: vimentin focally, CK 20. Negative stains: TFE3, CD117, HMB45, AMACR, CK 7	<a href="#">CASE 7</a>	Renal cell carcinoma - Eosinophilic solid and cystic (ESC)
8	78	Female	Kidney	Yellow-tan to red-brown tumor with extension into perinephric fat	78 year-old woman with renal mass	Patchy positivity for melan-A, negative HMB45, focal staining for cathepsin K, negative carbonic anhydrase IX, negative KIT, negative CK7, moderate AMACR, diffuse positive AE1/AE3	<a href="#">CASE 8</a>	Renal cell carcinoma - MiT Family Translocation RCC (Xp11, t[6;11])
9	68	Female	Partial nephrectomy	Partial nephrectomy measuring 23x20x9mm including a 18mm tumour with yellow-orange cut surface, 3mm from renal parenchymal margin.	Previous left RCC. Mass right kidney.	CK7, vimentin, EMA, 34bE12 strongly and diffusely positive. CD10, CD117, RCC and AMACR negative.	<a href="#">CASE 9</a>	Renal cell carcinoma - Clear cell papillary
10	29	Male	H&E is of tumour and adjacent uninvolved kidney	3cm well circumscribed tumour with tan, variegated cut surface.	Kidney tumour, partial nephrectomy.	Pan-cytokeratin (AE1/3) focally positive, Vimentin positive, CD10 focally positive, HMB45 negative	<a href="#">CASE 10</a>	Renal cell carcinoma - MiT Family Translocation RCC (Xp11, t[6;11])

11 57

Female

Radical  
Nephrectomy

The specimen consists of a kidney with perinephric fat together measuring 120 x 65 x 60mm. On slicing there is a multiloculated cystic tumour present measuring a maximum of 55 x 45 x 40mm. This is within the kidney parenchyma and has a pushing margin with the renal sinus. There is no macroscopic direct invasion into the renal sinus fat or the perinephric fat. The tumour distends the renal capsule but does not appear to breach it. It is 30mm from the vascular resection margin.

Left renal Bosniak III cyst

Tumour positive for CK8/18, vimentin, CD10, and AMACR. Occasional of the epithelial cells are CK7 positive (this also highlights entrapped tubules within the tumour). The epithelial cells lining the cysts are negative for 34 beta E12, CD117, CalX, HMB 45, melan A, ER, PR (the stroma is also negative for HMB45 and melan A, and for CD10, ER, PR). The SDHB and fumarate hydratase immunohistochemistry is positive (there is no evidence of succinate dehydrogenase deficiency or of fumarate hydratase deficiency).

[CASE 11](#)

Renal cell carcinoma  
- Tubulocystic renal  
cell carcinoma