Images in Nephrology
(Section Editor: G. H. Neild)

Horseshoe polycystic kidney

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Keywords: horseshoe kidney; nephrectomy; polycystic kidney disease

A 38-year-old man with known autosomal dominant polycystic kidney disease (ADPKD) was electively admitted to our institution for open bilateral nephrectomies. A routine computed tomography scan had demonstrated a cyst at the upper pole of the left kidney with changes suspicious of malignancy and para-aortic adenopathy. His serum creatinine level was 510 mmol/L and the estimated glomerular filtration rate was 11 at the time of nephrectomy. At laparotomy, midline fusion was immediately apparent with the inferior mesenteric artery anterior to the isthmus. Following extensive dissection, a true polycystic horseshoe kidney was excised. Histological analysis confirmed a polycystic horseshoe kidney fused at the lower pole. The specimen was widely sampled and a comparison was made between the imaging and clinical information provided. The appearances were of normal polycystic kidneys with no tumour identified (Figures 1 and 2).

Fig. 1. Surgical specimen of horseshoe polycystic kidney.

Fig. 2. Longitudinal section of horseshoe polycystic kidney specimen.

ADPKD and horseshoe kidney are independently not considered rarities. The incidence is reported to be between 1 in 500 and 1 in 5000 births for ADPKD [1] and between 1 in 400 and 1 in 800 for horseshoe kidney [2]. A polycystic horseshoe kidney is a rare clinical finding with the incidence ranging from 1 in 134 000 to 1 in 8 million cases [3].

Conflict of interest statement. None declared.

References

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Received for publication: 23.8.12; Accepted in revised form: 12.9.12