The deceiving image: asymptomatic renal malakoplakia in a patient with chronic renal failure

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The diagnosis of tumour-like renal lesions may be difficult in chronic renal failure (CRF) patients. We present a patient with severe CRF, in whom the diagnosis of malakoplakia during intervention avoided nephrectomy, thereby preserving his residual renal function.

The patient is a 65-year-old architect, who has type 2 diabetes known since 33 years with widespread organ damage. At referral, the kidneys were of regular shape; a stone (Ø = 1 cm) was present in the left lower calyces. His serum creatinine was 5 mg/dl in 2000.

A routine ultrasound showed a solid, non-homogeneous mass (27 mm) in the left pyelic echoes. Magnetic resonance displayed a solid lesion, with irregular contrast enhancement, highly suggestive for malignancy, in relationship with the renal vein, extending from the posterior margin to the renal pelvis, causing moderate dilatation of the upper calyces (Figure 1). The patient was scheduled for laparoscopic nephrectomy. At laparoscopy, a hypertrophic non-neoplastic lesion was found. Intraoperative needle biopsy disclosed diabetic glomerulosclerosis, fibrous adipose tissue and non-specific, non-neoplastic cytological abnormalities. At subsequent examination (HE, PAS stains; immunoreactivity for CD-68) the lesion was diagnosed as malakoplakia, a rare and severe interstitial nephritis generally associated with local or systemic inflammation with characteristic histological lesions [1,2]. At imaging, the lesion may mimic neoplasia. The renal mass was not removed. The patient is asymptomatic at present, and the lesion has remained unchanged. The serum creatinine is stable at 4.4 mg/dl.

This case shows that malakoplakia must be included in the differential diagnosis of asymptomatic tumour-like renal lesions: the asymptomatic presentation of this rare interstitial nephropathy (usually associated with fever, sepsis or severe systemic
diseases) enhances the interest in this case. It also underlines the importance of a cautious, if possible laparoscopic, approach in CRF patients in which conservation of renal tissue is crucial.

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References