Giant bilateral perinephric tumour and overt proteinuria

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A 63-year-old man with type 2 diabetes mellitus and hypertension presented with increasing abdominal girth and foamy urine for the previous 2 years. Impaired renal function (BUN 33 mg/dl, serum creatinine 2.3 mg/dl), hypoalbuminaemia (2.3 g/dl), overt proteinuria (11.2 g/day), microscopic haematuria (RBC 21-35/HPF) and bilateral perinephric tumour were noted at a local hospital. Non-contrast enhanced computed tomography of the abdomen confirmed giant bilateral perinephric tumour with fat component (Figure 1). The differential diagnosis included retroperitoneal liposarcomas or bilateral angiomylipoma arising from renal capsule. After referral, physical examination revealed distended abdomen without palpable mass. Magnetic resonance imaging (T1-weighted) demonstrated a lipomatous tumour of about 10 cm in size, in the bilateral perinephric space (Figure 2). There was absence of radiological features of angiomylipoma, including linear or branching appearance of intra-tumoural vessels with evident contrast enhancement, aneurysmal dilatation of intra-tumoural vessels, haemorrhage within and outside the tumour, and the bridging vessel or beak signs [1]. Hence, bilateral perinephric liposarcoma was favoured. However, a sonography-guided needle biopsy of the left tumour showed only fibroadipose tissue, without identification of malignant cells. The simultaneous needle biopsy of left kidney revealed focal segmental glomerulosclerosis (FSGS). Considering the invasive clinical course of the tumours, bilateral radical nephrectomy, with excision of the retroperitoneal tumours, was performed. The pathology disclosed well-differentiated liposarcomas with encasement of bilateral kidney and involvement of the renal sinus, and further confirmed FSGS. The patient thereafter underwent regular uneventful haemodialysis. The FSGS and liposarcomas may just be coincidental in this patient. However, the probability of bilateral perinephric liposarcoma with secondary FSGS still cannot be completely excluded.

Around 12–40% of liposarcomas occur in the retroperitoneum [2,3], and of these, 35% originate in the perirenal fat [2]. Although liposarcoma is the most common retroperitoneal soft tissues sarcoma, retroperitoneal liposarcoma comprises only about 0.1% of all cancers [2,3]. Liposarcomas tend to grow slowly in...
the expandable retroperitoneal space, deeply hidden and clinically silent. Therefore, the size is often large when diagnosed [2,3]. Symptoms at the time of presentation include a palpable abdominal mass or genitourinary and gastrointestinal symptoms from extrinsic compression from a large mass on adjacent viscera [3]. It is suggested that aggressive, radical total surgical excision followed by adjuvant post-operative irradiation be used as the treatment of choice of liposarcomas [2–4].

Conflict of interest statement. None declared.

References


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