

PERIANEURYSMAL RETROPERITONEAL FIBROSIS: A RARE CASE OF ACUTE KIDNEY FAILURE

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Introduction. Perianeurysmal retroperitoneal fibrosis (RPF) is a part of a disease spectrum of retroperitoneal fibrosis (RF), an uncommon fibro-inflammatory condition characterised by adventitial and periadventitial inflammation, medial thickening, and advanced atherosclerosis, with further ureteral involvement. In many cases RF is one of the most common presentations of IgG4-related disease.s

Case Description. A 57-years old man was presented to Pauls Stradiņš Clinical University hospital with a 3-week history of nausea and mild lower back pain. An early USG revealed acute bilateral hydronephrosis. Following CT scan revealed an infrarenal abdominal aortic aneurysm with retroperitoneal soft tissue mass surrounding the aortic aneurysm 7.8×8.2 cm Ø, with penetrating atherosclerotic ulcer at L4 level, but no active extravasation. Furthermore, bilateral ureteral compression causing stage III hydronephrosis and inferior vena cava compression was noticeable. Bilateral hydronephrosis was treated with pigtail catheter placement in both kidneys. Laboratory examination revealed the patient to be IgG4 negative, and constantly high blood urea levels and serum creatinine, for which the patient was administered to dialysis. Despite the treatment and slight improvement in renal function, the patient developed multiorgan failure, which led to lethal outcome.

Summary. A patient with a rare case of perianeurysmal retroperitoneal fibrosis with acute kidney failure, leading to lethal outcome.

Conclusions. CT imaging is essential for the diagnosis and treatment of perianeurysmal RPF. However, RF remains an uncommon cause of severe acute kidney failure, leading to delayed diagnosis when these patients present outside of specialised clinics. Retroperitoneal fibrosis should be considered in older patients with acute kidney failure, even in the absence of ultrasonographic evidence of obstruction.