14. Gourgiotis S, Vougas V, Germanos S, Dimopoulos N, Bolanis I, Drakopoulos S, et al. Operative and nonoperative management of blunt hepatic trauma in adults: a single-center report. J Hepatobiliary Pancreat Surg 2007;14:387-91.

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Lithium poisoning and proteinuria in the nephrotic range

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Dear Editor:

The incidence of renal affectation in Systemic Sclerosis (SSc) is difficult to establish, because in the early stages and in its milder forms, the manifestations may be subclinical, and they may coincide with other pathologies, given the disease's long evolution. We distinguish between three types of nephropathy: acute, chronic and overlap syndrome (associating scleroderma and other rheumatic illnesses).[1-2]

Clinical case

Male patient, aged 36 years with a history of SSc since 2000, bipolar disorder, terminal ileitis, consumer of alcohol and marijuana.

Underwent treatment with D-penicilamine for the SSc for several years, which was discontinued a year ago due to gastric distress. Usual treatment: nifedipine, deflazacort, lithium and olanzapine.

In January 2008, the patient was referred for renal failure (RF) study, due to recent presentation of plasma creatinine at about 2mg/dl, proteinuria 300mg/dl and hypoalbuminaemia 2.36g/dl.

Physical examination showed limited flexion of the fingers; the rest was normal. BP: 123/76mmHg.

Analytical tests showed: haemoglobin, 11.5g/dl; urea, 138; creatinine, 4.2; cholesterol 157mg/dl. Total proteins, 5.4; albumin 2.6g/dl. PTH, 119pg/mml. Widespectrum immunology screen negative except for ANCA-anti-MPO+. Proteinuria, 4.2g/día; sediment, 1,042 red blood cells per high-power field. Creatinine clearance 25ml/min. In studies prior to 2000, anti-scl 70 and ANA+ were prominent. The ultrasound showed kidneys measuring 11.5cm with an increase in cortical echogenicity.

Given the presence of RF and proteinuria in the nephrotic range, we started treatment with ramipril and recommended discontinuing the lithium.

15 days later, the patient came to the Emergency Room with nausea, vomiting, and abdominal pain that had been evolving over several days. He presented a lithaemia of 4.4 mEq/l,; crp 5.8; urea 178mg/dl. Hydration treatment was started, despite the fact that it increased lithaemia; for this reason, the patient underwent emergency haemodialysis. In subsequent checks, the lithaemia was below 1.5meq/l, so it was not necessary for him to undergo additional haemodialysis sessions.

As glomerular disease was suspected, we performed a kidney biopsy. The anatomical pathology showed 10 glomerules, of which two were sclerotic and six had focal and circumferential epithelial crescents and diffuse mesangial proliferation and capillary lumens obliteration with a mixed interstitial inflammatory infiltrate. Negative immunofluorescence test (figures 1 and 2).

We started immunosuppression with three methylprednisolone tablets, followed by 1mg prednisone/kg/day and 900mg of cyclophosphamide in a monthly bolus, and followed up on the patient.

We arrived at the clinical opinion that it was probably overlap syndrome scleroderma/vasculitis with ANCA-anti-MPO+ with stage IV CKD secondary to proliferative mesangial glomerulonephritis with extracapillary proliferation.

Discussion

Hybrid forms of scleroderma/ANCA-vasculitis, sometimes associated with glomerulonephritis, are described in up to 10% of all cases. This overlap syndrome may occur after a period of treatment with D-penicilamine which varies from five months to five years. For some authors, this association represents a new entity that is related with this drug. Although our patient had gone at least a year without taking it, we can establish the hypothesis that the D-penicilamine could have acted latently as an antigenic factor, and then triggered the extracapillary form of vasculitis.[3-7]

1. Tomioka M, Hinoshita F, Miyauchi N, Et al. ANCA-related crescentic glomerulonephritis in a patient with scleroderma without marked dermatological change

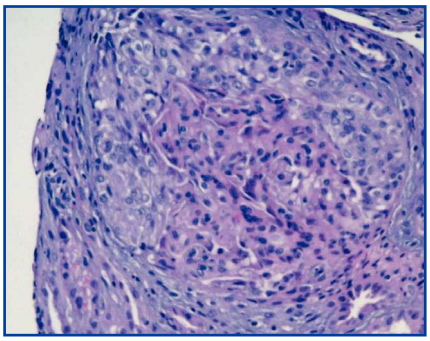

Figure 1. Aematoxylin-eosin stain, 20 x 10. Glomerule in which we see a circumferential crescent with a ruptured Bowman's capsule.

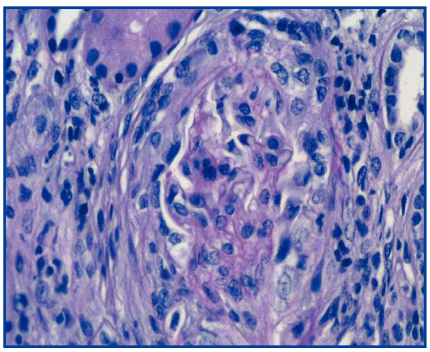

Figure 2. PAS stain, 20 x 10. Glomerule in which we observe a crescent with mixed inflammatory infiltrate obliterating the capillary lumens.

and malignant hypertension. Intern Med 2004;43:496-502.
2. Arnaud L, Huart A, Plaiser E, et al. Anca-relatec crescentic glomerulonephritis in systemic sclerosis: revisiting the normotensive scleroderma renal crisis. Clin Nephrol 2007;68:165-70.
3. NanKe Y, Akama H, Terai C, et al. Rapidly progressive glomerulonephritis with D-penicillamine. Am J Med 2000;320:398-402.
4. García Porrua C, González Gay MA, Bouza P. D-penicillamine induced crescentic glomerulonephritis in a patient with scleroderma. Nephron 2000;84:101-2.
5. Arunachalam R, Thiraviam K, Tholappan R, et al. Scleroderma with crescentic glomerulonephritis: a case report. J Med Case Reports 2008;13:151-5.
6. Endo H. Scleroderma renal crisis: hypertensive and normotensive. Nihon Rinsho Meneki Gakkai Kaishi (Jpn J Clin Immunol) 2000;23:656-60.
7. Kamen DL, Wigley FM, Brown AN. Anti-neutrophil cytoplasmic antibody-positive crescentic glomerulonephritis in scleroderma-a different kind of renal crisis. J Rheumatol 2006;33:1886-8.

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Not significant stenosis of renal artery in a single kidney does not counter-indicate placing an endovascular aortic prosthesis

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Dear Editor:

We present the case of a female patient aged 75 years who has been hypertensive for many years and has a urological history of recurring pyelonephritis, which in June 1992 required a nephrectomy of the right kidney. Since then, she has maintained stable renal function with a glomerular filtration rate between 35-40ml/min/1.73m^2 according to the simplified MDRD. In May 2002, a routine abdominal ultrasound examination detected an aneurism of the subrenal abdominal aorta 3.5cm in diameter that is checked periodically. An abdominal CT in July 2006 showed that the aneurism had grown to reach 5.6cm in diameter and that it was accompanied by stenosis of approximately 50% of the left renal artery at the point of origin and of the inferior polar renal artery that irrigated more than a third of the kidney (figure 1). Despite these technical difficulties, in February 2007 we proceeded to place an aortouniliac infrarenal endoprosthesis which left the exit of the polar artery and the left renal artery free (figure 2). From that moment, the patient has maintained a stable renal function with acceptable management of blood pressure.

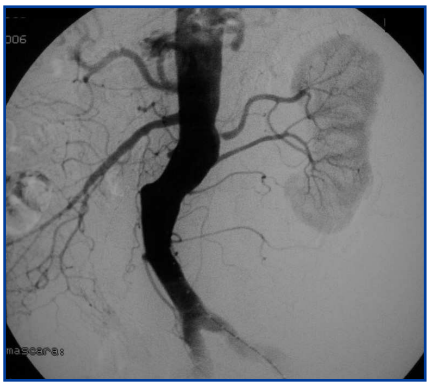

Figure 1. Arteriography of the abdominal aorta and iliac arteries. We observe a single left kidney, the lumen of the aneurism on the infrarenal aorta, and a left renal artery with stenosis on its point of origin and a large-diameter inferior polar artery.

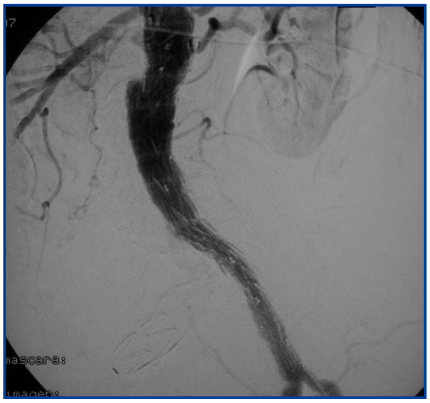

Figure 2. Arteriography of the abdominal aorta and iliac arteries with right aortouniliac infrarenal prosthesis.

Aneurisms of the abdominal aorta are a very prevalent condition, with an incidence that varies depending on age and sex. Aneurisms of the abdominal aorta are normally asymptomatic and are detected incidentally. On many occasions, the first sign is rupture (with a low risk for aneurisms ≤ 5.5cm in diameter, but high for larger diameters) with a mortality rate of 80% for those that break.

For years, elderly patients and those with multiple diseases were not treated surgically, but in 1991 endovascular prostheses arrived on the scene. This technique consists in the placement of a synthetic Y-shaped prosthesis with two arms, one for the abdominal aorta and an iliac artery, and the other for the contralateral iliac artery, which is inserted through the common femoral artery and guided using radioscopy. The prosthesis is located near the neck of the aneurism and the stents that are in place guarantee that it is in the right position, preventing it from shifting. There are also prostheses with windows for the renal arteries, for cases in which the aneurism affects them as well.

For the case in question, our priority was to preserve the inferior polar artery, which left a short aneurismatic pouch behind. For this reason, we used an aortouniliac prosthesis combined with a femoro-femoral bypass that guaranteed vascularisation of the left leg. At that time, we decided to do nothing about the stenosis of the renal artery, as it was not significant.

By placing endovascular prostheses, we now have less invasive treatment alternative; it has a low mortality rate