

weeks, although some authors recommend an additional two doses per month. Prednisone is started at a dose of 1mg/kg/day (maximum 80mg daily) for a month with a progressive decrease in the next six months.<sup>13</sup>

## CONCLUSIONS

We present this case due to the excellent response and because rituximab had no adverse effects in treatment-resistant CSS with renal involvement. There are increasingly more publications that indicate rituximab in cases of treatment-resistant ANCA-associated vasculitis, but more studies will be needed in order to find drugs with safer profiles and with less risk to the patient.

## Conflicts of interest

The authors declare that they have no conflicts of interest related to the contents of this article.

- Noth I, Strek ME, Leff AR. Churg-Strauss syndrome. *Lancet* 2003;361:587-94.
- Clutterbuck EJ, Evans DJ, Pusey CD. Renal involvement in Churg-Strauss syndrome. *Nephrol Dial Transplant* 1990;5:161-7.
- Stone JH, Merkel PA, Spiera R, Seo P, Langford CA, Hoffman GS, et al. Rituximab versus cyclophosphamide for ANCA-associated vasculitis. *N Engl J Med* 2010;363:221-32.
- Jennette JC, Falk RJ, Andrassy K, Bacon PA, Churg J, Goss WL, et al. Nomenclature of systemic systemic vasculitides. Proposal of an international consensus conference. *Arthritis Rheum* 1994;37:187-92.
- Merino JL, Galeano C, Espejo B, Rivera M, Fernandez-Lucas M, Caldés S, et al. A retrospective study on outcome of microscopic polyangiitis in chronic renal replacement therapy. *Nephrol Dial Transplant* 2011;26:1360-6.
- Gayraud M, Guillevin L, Le Toumelin P, Cohen P, Lhote F, Casassus P, et al.; French Vasculitis Study Group. Long-term follow-up of polyarteritis nodosa, microscopic polyangiitis and Churg Strauss syndrome: analysis of four prospective trials including 278 patients. *Arthritis Rheum* 2001;44(3):666-75.
- Mitchison NA. T-cell-B-cell cooperation. *Nat Rev Immunol* 2004;4:308-12.
- Stasi R, Stipa E, Del Poeta G, Amadori S, Newland AC, Provan D. Long-term observation of patients with anti-neutrophil cytoplasmic antibody-associated vasculitis treated with rituximab. *Rheumatology (Oxford)* 2006;45:1432-6.
- Rocatello D, Baldovino S, Alpa M, Rossi D, Napoli F, Naretto C, et al. Effects of anti-CD20 monoclonal antibody as a rescue treatment for ANCA-associated idiopathic systemic vasculitis with or without overt renal involvement. *Clin Exp Rheumatol* 2008;26(3 Suppl 49):S67-71.
- Keogh KA, Wylliam ME, Stone JH, Specks U. Induction of remission by B lymphocyte depletion in eleven patients with refractory antineutrophil cytoplasmic antibody associated vasculitis. *Arthritis Rheum* 2005;52:262-8.
- Gottenberg JE, Gullevin L, Lambotte O, Combe B, Allanore Y, Cantagrel A, et al. Tolerance and short term efficacy of rituximab in 43 patients with systemic autoimmune diseases. *Ann Rheum Dis* 2005;64:913-20.
- Saech J, Owczarczyk K, Rösigen S, Peterleit H, Hallek M, Rubbert-Roth A. Successful use of rituximab in a patient with Churg-Strauss syndrome and refractory central nervous system involvement. *Ann Rheum Dis* 2010;69(6):1254-5.
- Cartin-Ceba R, Keogh KA, Specks U, Sethi S, Fervenza FC. Rituximab for the treatment of Churg-Strauss syndrome with renal involvement. *Nephrol Dial Transplant* 2011;26:2865-71.

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## Transovarian venous access in a patient with exhausted vascular access for haemodialysis

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### To the Editor:

The availability of a vascular access is essential for adequate haemodialysis. Vascular access is therefore the Achilles' heel of this treatment. When patients present venous access depletion, either for the creation of an arteriovenous fistula, a vascular prosthesis or the placement of a tunnelled catheter, we must resort to a change of dialysis modality if possible, otherwise unconventional venous access routes must be considered.<sup>1,2</sup>

We report the case of a patient with stage 5D chronic kidney disease (CKD) with exhausted accesses in whom we placed a tunnelled catheter transovarially.

### CASE REPORT

Our patient is a 27-year-old female with CKD secondary to renal hypoplasia diagnosed at 2 years of age. At 9 years of age she had stage 5D CKD and received a living related donor kidney transplant; eight years later, she lost transplant function due to chronic rejection and had to begin a tri-weekly haemodialysis treatment. There were multiple complications due to obstructions and infections of the vascular access points for haemodialysis. Ten years later, she was transferred to our institution due to exhaustion of vascular accesses. An angiography of the upper and lower limbs and vena cava was performed, which showed thrombosis in both jugular and subclavian veins and the brachiocephalic artery, as well as in both femoral and iliac veins. Without the possibility of a living related donor transplant, it was decided to start peritoneal dialy-



**Figure 1.** Radiographic image showing the route of the tunnelled catheter, which enters the inferior vena cava through the ovarian vein.



**Figure 2.** unnelled catheter emerging at the right iliac fossa.

sis and register her on the emergency waiting list to receive a deceased donor kidney transplant. A catheter was introduced for peritoneal dialysis and this treatment was started immediately using a cyclor and a suitable dialysis dose was achieved with good tolerance.

Due to the patient's vascular condition, the transplanted kidney required an aortocaval vascular anastomosis, which interfered with the peritoneal access and, therefore, the patient lost the ability to continue with peritoneal dialysis in the period following transplantation until the recovery of function. The requirement for a conventional access route was therefore considered at the time of transplantation.

When a deceased donor kidney became available, a catheter was placed in the ovarian vein for haemodialysis during surgery and after transplantation. The right ovarian vein was dissected (it was dilated due to iliac vein obstruction) and a 40cm long, 14.5 French diameter Quinton Permcath® Dual Lumen tunnelled catheter was inserted. A retention suture was placed on the vein as far as the inferior vena cava. The placement was confirmed by radiography and subcutaneous tunnelling

was performed on the abdominal wall (Figures 1 and 2). The procedure was well tolerated. We began anticoagulation with sodium heparin 6 hours after surgery. Forty-eight hours after the kidney transplantation, the patient required her first dialysis treatment, which was performed via the catheter with optimal blood pump flow and without complications. This enabled dialysis treatment to be performed until recovery of transplant function.

## DISCUSSION AND CONCLUSIONS

We found no reports in the literature of cases in which this access route was used for the placement of catheters for haemodialysis. The use of other unconventional routes<sup>1,2</sup> for vena cava access, such as the transhepatic route<sup>3,4</sup> or the translumbar route<sup>5</sup> in this patient would have required a pre-transplant procedure under angiographic and ultrasound control for accurate vascular puncture and access. This patient underwent peritoneal dialysis without complications until the time of transplantation. The use of the ovarian vein route offered the possibility of a quick and accessible approach.

The transovarian route may be considered to be another unconventional alternative for catheter use in fe-

males with exhausted haemodialysis accesses.

## Conflicts of interest

The authors declare that they have no conflicts of interest related to the contents of this article.

1. Weeks SM. Unconventional venous access. *Tech Vasc Interv Radiol* 2002;5(2):114-20.
2. Younes HK, Pettigrew CD, Anaya-Ayala JE, Soltes G, Saad WE, Davies MG, et al. Transhepatic hemodialysis catheters: functional outcome and comparison between early and late failure. *J Vasc Interv Radiol* 2011;22(2):183-91.
3. Herscu G, Woo K, Weaver FA, Rowe VL. Use of unconventional dialysis access in patients with no viable alternative. *Ann Vasc Surg* 2013;27(3):332-6.
4. Rosa-Díez GJ, Lambertini RG, Peralta O, Diodato LH, Algranati SL, García-Mónaco RD. Transhepatic venous access as an alternative for Tesio catheter in the case of a patient on haemodialysis with antiphospholipid syndrome. *Nephrol Dial Transplant* 2006;21(7):2031-3.
5. Power A, Singh S, Ashby D, Hamady M, Moser S, Gedroyc W, et al. Translumbar central venous catheters for long-term haemodialysis. *Nephrol Dial Transplant* 2010;25(5):1588-95.

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