The optimum treatment for hepatitis C in renal transplant patients today is controversial. Use of interferon is not advised, since it increases the chance of episodes of acute humoral rejection (15-64%) three to six months after beginning treatment,[3] and its use is indicated only in patients with fibrosing cholestatic hepatitis, where there is a significantly increased morbi-mortality. The incidence of acute humoral rejection is lower in patients with long-developing transplants, owing to immunological accommodation. The mechanism for inducing acute rejection is unclear, but it is thought that the drug increases the release of HLA antigens in the cellular surface and induces the release of cytokines, consequently stimulating the production of antibodies.[4] To minimise the risk of rejection, patients should have stable immunosuppression and should be closely monitored.[5]

The case in question concerns a patient with a normally functioning kidney transplant and stable renal function who received, twelve years after transplant, treatment with ribavirin and interferon-alpha, with a subsequent episode of humoral rejection. The importance of this case lies in the fact that the acute humoral rejection appeared during the late post-transplant period, and three months after having completed interferon treatment, which is uncommon.

In conclusion, it is of vital importance that nephrologists and digestive specialists know the indications of interferon in the transplant population, weighing up its potential benefits against the risk of rejection, and ensure patients on antiretroviral treatment are more closely monitored, even once this treatment has ended. Safer and more effective treatments are needed for treating renal transplant patients with infection from the hepatitis C virus.

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Acute ischaemia as a consequence of arteriovenous fistula massage in haemodialysis

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Dear Editor:
Massage of an arteriovenous fistula following thrombosis can restore blood flow and avoid the comorbidity associated with catheters. However, this practice carries significant risks. We present the case of a male with thrombosis of the humero-cephalic arteriovenous fistula who, following massage, showed an acute ischaemia of the left upper extremity due to embolisation of the humeral artery.

The patient is 53 years old with chronic renal failure secondary to IgA nephropathy, in substitutive renal treatment for the last 19 years: 10 in haemodialysis and 9 in renal transplant. At present, the patient is on a regime of four haemodialysis sessions per week. The patient has chronic obstructive pulmonary disease and obstructive sleep apnoea syndrome. A diagnosis of myocardial ischaemia (acute myocardial infarction six years previously) and advanced peripheral vasculopathy was made. The patient had undergone multiple failed vascular accesses: right and left radiocephalic thrombosed fistulae, right humerocephalic fistula and a thrombosed polytetrafluoroethylene (PTFE) humerobasilic graft. At present, dialysis is carried out by means of a left humerocephalic fistula, created two years ago.

The patient showed elevated haematocrit levels (44%). Phlebotomies were periodically performed to reduce the risk of thrombosis, accentuated by low arterial pressures and regular systolic pressures of around 85 or 90 mmHg.

He attended his haemodialysis session with low arterial pressure, and a short time following connection, the fistula thrombosed. On examination neither thrill nor bruit was found; the fistula had been functioning normally during the dialysis session one day previously. A fistula massage was performed, without recovering function. Immediately following the treatment the patient began complaining of pain in his hand and feeling cold, as well as cutaneous pallor. A colour Doppler sonography showed an absence of distal flow.

Both humeral and distal vessel thrombectomies were performed and a large amount of thrombotic material was extracted. The radial and humeral

pulse were eventually restored. Although limb infusion had been adequate in previous vascular surgical reviews, it poses a difficulty in wound healing.

Late-stage vascular access thromboses are of multifactorial etiology, with predisposing factors such as hypotension, haemoconcentration and hypercoagulable states.[1,2]

For treatment of vascular access thromboses, clinical practice guidelines recommend surgical thrombectomy or mechanical or pharmacomechanical thrombolysis, depending on experience, with good results.[3,4] None of the guidelines either recommend or advise against massage as an immediate treatment of thrombosis of an arteriovenous fistula. However, in practice this technique is applied with a view to performing a fistulography within subsequent hours.

There are no publications in the scientific literature that approach this subject. Only a case of embolisation following massage of a PTFE graft is described. Our case is similar, only with an autologous fistula. Both cases demonstrate one of the potential negative consequences of practising massage: distal embolisation of the extremity, for which an early diagnosis of acute ischaemia is necessary. Other possible consequences, such as pulmonary embolism, also cannot be ruled out. Unfortunately, there is no evidence to quantify the favourable results of internal fistula massage in correcting a thrombosis, meaning we are unable to establish a balance between its risks and benefits. It is possible that the benefit is greater in radiocephalic fistulae, owing to their distal location and presence of the palmar arch. Despite this, to the extent that established therapeutic options exist for the correction of a vascular access thrombosis (surgical thrombectomy and thrombolysis), we believe that the practice of massage should be advised against due to its potential complications.

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Late pleuroperitoneal leak in a peritoneal dialysis patient

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Dear Editor:
Mechanical complications in peritoneal dialysis (PD) are common, particularly the appearance of abdominal herniae dependent on a sustained increase of intra-abdominal pressure.[1] The presence of anomalous pleuroperitoneal communication results in the appearance of massive pleural effusion.[2]

Diagnosis is usually clinical, although there are various available imaging techniques for confirming this.[3] In our centre we have available the Tc-99 scintigraphy, and have used it as a simple and innocuous method for confirming clinical suspicions.

We present the case of a 52 year old patient who began a CAPD programme in April 2008 following five years in haemodialysis. No pathological history of interest, except nephroangiosclerosis as cause of renal failure.

The PD catheter was fitted using a laparoscopic technique (Techknoff swan neck, rectum) without complication. At two months the patient was following a routine of APD with no problems. The course was completed on a humid day at low volume due to abdominal discomfort.

Four months after fitting the catheter the patient suddenly complained of general discomfort and intense epigastric pain with no vomiting, depositional alterations or fever. Orthopnoea and pain in the right ribcage with a dry cough. Increase in weight of 2kg during previous days, apparently without loss of UF.

On examination, global hypoventilation of the right lung was apparent. There was no oedema and the abdomen was normal.

A chest x-ray showed a massive right pleural effusion.

A thoracentesis was performed and one litre of liquid was obtained which had properties similar to dialysis liquid, with high glucose content. Negative cultures.

With a diagnosis of pleural drainage, we proceeded to peritoneal rest.

A scintigraphy was carried out, which showed the presence of a right pleuroperitoneal leak (figure 1). The patient remained on haemodialysis for three months, then resumed APD without relapse. The scintigraphy was

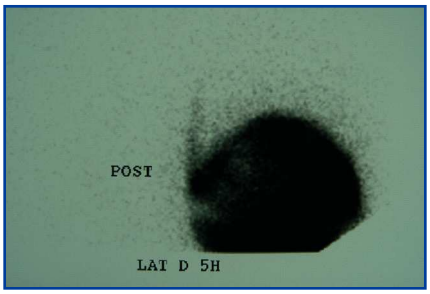

Figura 1.