Table 1. Drug combinations that caused hyperpotassaemia in patients with ORF

Drugs	No. patients	Serum potassium
NSAID + ACE inhib/ARBs	13	5.42mEq/L (range 5.1-6)
Only ACE inhibs or ARBs	6	5.25mEq/L (range 5.1-5.5)
Only NSAID	5	5.48mEq/L (range 5.1-5.6)
NSAID + spironolactone + ARBs	2	5.5 and 5.7mEq/L
NSAID + spironolactone	1	5.5mEq/L
ARB + spironolactone	1	5.7mEq/L
NSAID + ACE inhibitors + beta blockers	1	5.4mEq/L
Spironolactone only	1	5.3mEq/L

NSAID: non-steroidal anti-inflammatory drugs
ACE inhibitors: angiotensin-converting enzyme inhibitors.
ARBs: angiotensin II receptor blockers.

currently the OMI-AP system issues a warning when doctors prescribe a drug which has been highlighted for causing an allergic reaction. Furthermore, if this system or any other IT system were able to combine the information about the patient's GF with the precise adjustments in the handbook, it would be possible to avoid many of the consequences associated with incorrect prescriptions.

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HBSAG positivization following vaccination during haemodialysis

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Dear Editor,

The administration of the hepatitis B virus (HBV) vaccine to patients undergoing renal replacement therapy using the technique of haemodialysis is common in haemodialysis units, given that these patients are considered high risk. The vaccines used are made up of recombinant particles, which are mostly main surface proteins.[1] The vaccine used in our hospital is Engerix-B which involves an intramuscular injection of 40 micrograms at the following times: 0, 1, 2 and 6 months; in non-responsive patients, this is administered a second time.

The case of two patients who presented positive results for hepatitis B surface antigen (HbsAg) following vaccination is described here. The first case involves a 60-year-old woman who began renal replacement therapy (RRT) using the haemodialysis technique (HD) in April 2009 because of chronic kidney disease (CKD), secondary to mesangiocapillary glomerulonephritis, and received the first monthly dose of the vaccine on 30 May 2009. The second case involves a 51-year-old woman who began RRT via HD in March 2009 because of CKD secondary to Wegener's granulomatosis and received the second monthly dose of the vaccine on 30 May 2009. Viral marker testing was carried out on 2 June 2009 in accordance with the protocol established in our hospital and both patients were HbsAg positive. Therefore, it was decided that they should be isolated and that all patients and staff in the unit should be tested for hepatitis B virus DNA and transaminases. The results were negative and both patients also presented negative results for HbsAg.

To summarise, in the cases presented, false positive results for HbsAg were observed following vaccination.[2,3,4] The objective of describing these cases is to highlight the possibility of obtaining false positive results following vaccination and to remind others that serological tests should be carried out at least 2-3 weeks after vaccinations are administered.[2,3,4]

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C) BRIEF CASE REPORTS

Proximal calciphylaxis in a liver and kidney transplant patient

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Dear Editor,

Studies suggest that incidence of calciphylaxis is 1% per year, with a prevalence of 4% among dialysis patients,[1] however it is rarely present in kidney transplant patients or in those with stage 3 or 4 chronic kidney disease.[2]

The proximal distribution of lesions and the presence of ulceration are associated with a very poor prognosis, mainly because of wound infection and the subsequent death of the patient.[3] In the cases of calciphylaxis described in kidney transplant patients, the prognosis may be even worse[4,5] and the possible role of corticosteroids as a precipitant of the disease has also been discussed. However, although the pathogenesis of this condition is not well known, there are risk factors that could possibly contribute to proximal calciphylaxis and distal calciphylaxis in different ways. Therefore, no specific treatment has been established and in some cases a multidisciplinary and even empirical approach is needed. In any case, it is important to focus on normalising the phosphocalcic product and PTHi levels if they are elevated, since these are potential precipitants.[6]

We would like to present the case of a 66-year-old female patient who underwent her first liver transplant 11 years ago because of chronic alcohol-induced liver disease. She underwent a second kidney transplant three years before this admission because of mesangial glomerulonephritis caused by IgA deposits, which presented hardened lesions with central dermal necrosis that were symmetrical and very painful, located on the inner thigh on both legs and that indicated calciphylaxis (figure 1). A cutaneous punch biopsy was carried out and the diagnosis was confirmed. However, a bone scan showed no extraskeletal uptake. Her usual treatment consisted of furosemide, bisoprolol, prednisone, tacrolimus, mycophenolate mofetil, omeprazole and acenocoumarol (since she presented chronic atrial fibrillation) and subcutaneous darbopoetin. In the tests carried out, the following results stood out: CRP 51mg/l, Hb 10g/dl and creatinine 2.9mg/dl, because of chronic nephropathy of the graft, with proteinuria 2.6g/day, cholestatic pattern with GGT 230U/l and alkaline phosphatase 177U/l, corrected calcium concentration 8.6mg/dl, phosphorous 6.6mg/dl and initial PTHi 653pg/ml. Treatment with cinacalcet 30mg/day and aluminium hydroxide used as a phosphorus binder was administered. Phospocalcic products were normalised and PTHi values were stabilised at 150pg/ml. Despite this, large ulcers developed and enzymatic ointment (Iruxol Mono®), and moist gauzes were applied locally on a daily basis. Opiate derivatives were administered orally for pain relief, as well as 50g intravenous sodium thiosulphate three times a week. Her clinical progress was not satisfactory and haemodialysis was necessary 38 days after diagnosis via a catheter in the right internal jugular vein because of deteriorated kidney function. At the same time, it was also necessary to maintain the correct plasma levels of tacrolimus and avoid any accompanying septic symptoms. A few hours later she suffered non-recoverable cardiac arrest. No autopsy was carried out.

Despite our patient's fatal outcome, we would like to highlight the potential therapeutic benefits of cinacalcet in the treatment of proximal calciphylaxis with secondary hyperparathyroidism.[7] Its usefulness in transplant patients with calciphylaxis is yet to be demonstrated, although its effectiveness in controlling hyperparathyroidism has already been described.[8] Nor have we found any descriptions of other kidney transplant patients who were administered sodium thiosulphate, although its effectiveness has been demonstrated in several published studies involving dialysis patients. It has been observed that this drug is highly soluble in calcium

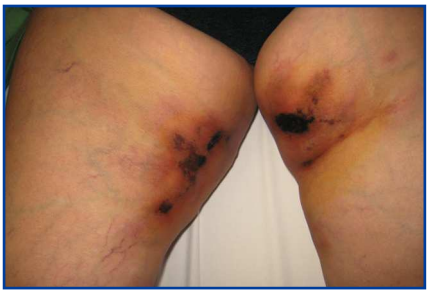

Figure 1.