While there are no pharmacokinetic data on the interactions between sirolimus and statins, it is certainly feasible that interactions could occur and result in tissue injury. In addition to the above case, the authors reference a case of rhabdomyolysis in a liver transplant recipient on sirolimus, tacrolimus and simvastatin [4]. Additionally, in a series of cardiac transplant patients on statin therapy who were transitioned from cyclosporine to sirolimus, there was a statistically significant doubling of myopathy events after the switch. Of note, most of the events were asymptomatic creatinine kinase elevations, and most occurred in the group of patients using pravastatin [5].

In our study, we found that the use of cyclosporine (compared with tacrolimus) after renal transplant was significantly associated with rhabdomyolysis. A proposed mechanism was the propensity for cyclosporine to induce dyslipidaemia, which could obligate statin use, which could result in drug–drug interactions, increasing risk of rhabdomyolysis. To that end, sirolimus should share this risk, given that its metabolism also depends on cytochrome P450 3A4. However, in our study, sirolimus was not significantly associated with rhabdomyolysis, although it did occur in six patients who were discharged on sirolimus.

Our study was limited in that we were unable to assess the longitudinal use of lipid-lowering drugs post-transplant and, therefore, were limited in the conclusions that we could draw on specific drug–drug interactions causing rhabdomyolysis. Case reports in the medical literature suggest that this does occur, and more pharmacokinetic data are needed which evaluate the potential interactions of sirolimus and statins, especially given the propensity for dyslipidaemia with the use of sirolimus. Until more data is available, it is not unreasonable to carefully monitor these patients for this complication.

Conflict of interest statement. None declared.

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Small solutes peritoneal membrane transport and endothelial function

Dear Sir,

The association between inflammation and impaired endothelial function in peritoneal dialysis (PD) patients has been demonstrated in an interesting paper by Choi et al.—well-nourished individuals, without inflammation, were found to have preserved endothelial function [1]. Our group has previously evaluated endothelial function in 31 prevalent peritonitis-free PD patients. A weak positive correlation between peritoneal glucose transport (D4/D0 glucose) and flow-mediated dilation (FMD), as well as a tendency for less compromised endothelial function in the low-transport group by peritoneal equilibration test (PET), was demonstrated [2]. Our hypothesis was that small solute membrane transport (SSMT) relates to endothelial function, even though such association could not be settled by such a small-sample study.

Higher peritoneal protein clearance on initiating PD has been shown to be associated with peripheral artery disease, being hence suggested as a new marker of systemic endothelial dysfunction [3]. In addition, peritoneal protein clearance was higher in high SSMT patients [3]. Inflammation may alter the peritoneal structure, resulting in functional changes such as increased SSMT, which has been associated with increased mortality risk [4]. One could speculate that impaired endothelial function might be the pathophysiological mechanism underlining the abnormal peritoneal function and increased mortality rate.

As we are not aware of other studies associating SSMT with endothelial function, we question whether Choi and colleagues have examined peritoneal function on their study patients and what sort of correlation they found between FMD and SSMT. We wonder if they were able to demonstrate any association between peritoneal transport, endothelial function and heightened inflammation in patients in the higher SSMT categories.

Conflict of interest statement. None declared.

Editorial note: Choi et al. was invited to reply to this letter, but we did not receive a response.


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Use of isoniazid chemoprophylaxis in renal transplantation

Sir,

I read with interest the paper ‘Use of isoniazid (INH) chemoprophylaxis in renal transplantation’ [1]. I agree with the authors that the use of INH could be considered mandatory in a high-risk population from a region where tuberculosis is endemic. However, we are not informed as to whether they observed any neurotoxicity [2], and if so, what tests were applied to exclude it. I am sure that the authors are aware of the role of pyridoxine in avoiding neurotoxicity and more so in patients who are ‘slow acetylators’. This neuropathy is due to axonal degeneration and is of mixed nature that is related to interference with pyridoxine metabolism.

Conflict of interest statement. None declared.

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Reply

Sir,

Dr Ahmad rightly mentioned neurotoxicity related to isoniazid, the mixed sensory motor neuropathy, especially in slow acetylators. Living in an endemic area for tuberculosis infection and having experienced with the use of anti-tuberculous drugs, we have observed this side effect of isoniazid. We, as a routine practice, give pyridoxine to all patients who received isoniazid as part of anti-tuberculous therapy.

Our present study population receiving isoniazid as chemoprophylaxis was also given pyridoxine along with isoniazid for a year. None of these recipients reported any neurological symptom.

Conflict of interest statement. None declared.

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