

## Pantoprazole/sirolimus

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**Acute interstitial nephritis: case report**

A woman [age not clearly stated] developed acute interstitial nephritis (AIN), most likely due to sirolimus treatment [dosage not stated] following renal allograft for polycystic kidney disease; she also received concomitant treatment with pantoprazole [dosage not stated] which the authors could not exclude as the causal agent.

Following renal allograft implantation at age 55 years, the woman received alemtuzumab and prednisolone followed by tacrolimus alone. When peritonitis was diagnosed 3 months later, tacrolimus immunosuppression was switched to prednisolone 25mg and sirolimus. Two years following implantation, a new ureteral implantation was planned due to ureteral stenosis and, to avoid impaired wound healing, sirolimus was switched to tacrolimus. With tacrolimus, her serum creatinine increased from 1.4 mg/dL to 1.8 mg/dL and so she was switched back to sirolimus 3 months after surgery; her prednisolone dosage at that stage was 2.5mg. Her serum creatinine initially decreased to 1.4 mg/dL (sirolimus blood concentration, 7.1 ng/mL). However, 3 weeks later her serum creatinine increased to 3 mg/dL and she had fever, shivering and a painful ulcer on her tongue. Her CRP was 7.6 mg/dL and urinalysis showed leucocytes and leucocyte casts; her  $\beta$ -2 microglobulin excretion was markedly increased [time to reaction onset not clearly stated]. Concomitant medications were pantoprazole,\* metoprolol and furosemide. Transplant biopsy, immunofluorescence and immunohistochemical staining findings were consistent with allergic AIN.

The woman's sirolimus was switched to tacrolimus and her pantoprazole was stopped. Her fever subsided and, within the next week, her CRP levels normalised but her serum creatinine level remained increased. Her prednisolone dosage was increased and, 2 weeks later, her serum creatinine level decreased to 2.0 mg/dL. Her AIN was considered to have completely resolved.

**Author comment:** *"The time course of reexposure to sirolimus followed by acute renal failure suggests that sirolimus was the causative agent in our patient." However pantoprazole "has been reported to induce AIN and it cannot be excluded as the causal agent".*

\* She had received pantoprazole for 3.5 years.

Lhotta K, et al. Sirolimus-associated acute interstitial nephritis in a renal allograft. *Transplant International* 23: e22-e23, No. 6, Jun 2010. Available from: URL: <http://dx.doi.org/10.1111/j.1432-2277.2009.01016.x> - Austria 803023835