

Twenty-Four Cases of Pneumonitis in Kidney Transplantation Recipients Receiving Sirolimus

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The full report is titled “Brief Communication: Sirolimus-Associated Pneumonitis: 24 Cases in Renal Transplant Recipients.” It is in the 4 April 2006 issue of *Annals of Internal Medicine* (volume 144, pages 505-509). The authors are L. Champion, M. Stern, D. Israël-Biet, M.-F. Mamzer-Bruneel, M.-N. Peraldi, H. Kreis, R. Porcher, and E. Morelon.

What is the problem and what is known about it so far?

Kidney transplantation involves surgically implanting a donated kidney into a patient whose own kidneys have stopped working. Because the body will develop an immune reaction to foreign tissues such as a donated kidney, it is necessary to treat patients with kidney transplants with drugs to suppress their immune systems. One such drug is sirolimus. There have been previous reports of a lung condition called pneumonitis in kidney transplant recipients who took sirolimus. However, there is limited information about this potential complication. Pneumonitis is a condition involving inflammation in the lungs that interferes with normal lung function.

Why did the researchers do this particular study?

To provide more detailed information about pneumonitis in kidney transplant recipients who received sirolimus than was included in previous reports of this condition.

Who was studied?

24 patients from 1 French transplantation center who developed pneumonitis while taking sirolimus after kidney transplantation.

How was the study done?

The researchers reviewed the medical records of the 24 patients and described the symptoms, laboratory tests, and outcomes.

What did the researchers find?

Common symptoms included cough in 23 patients, fatigue in 20 patients, fever in 16 patients, and shortness of breath in 8 patients. Computed tomography scans of the chest and a test called bronchoalveolar lavage were helpful in making the diagnosis in these patients. Bronchoalveolar lavage involves inserting a special instrument down the throat and into the lungs to obtain samples for examination. All patients required discontinuation of sirolimus therapy before they improved, and all recovered completely within 6 months of withdrawal of the drug.

What were the limitations of the study?

This description of 24 patients from 1 center does not provide information about how frequently this complication occurs.

What are the implications of the study?

Computed tomography and bronchoalveolar lavage seem to be helpful in making a diagnosis of sirolimus-associated pneumonitis. Patients seem to recover within 6 months of discontinuing sirolimus therapy.