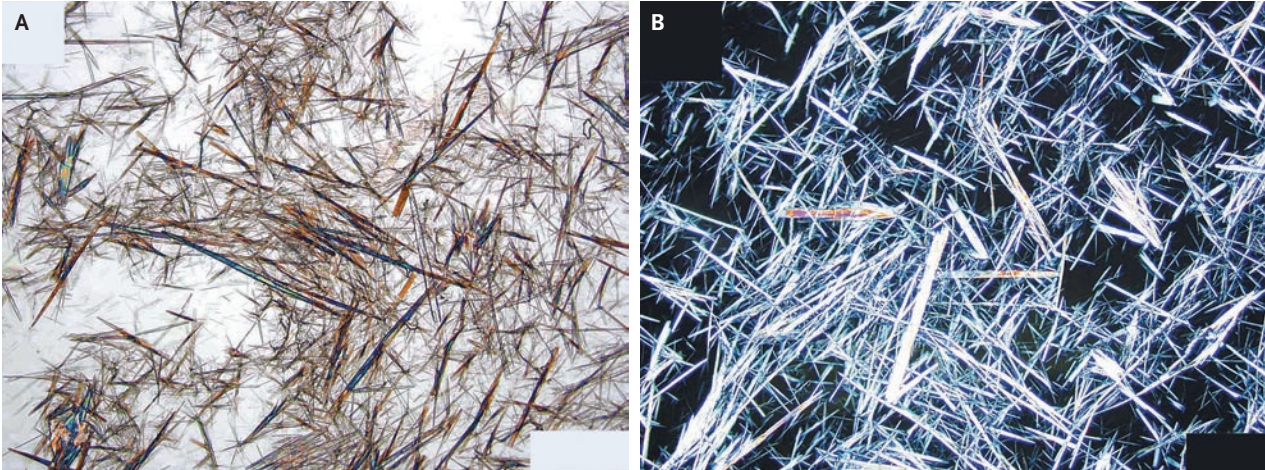


## Crystalluria from Acyclovir Use



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A 60-YEAR-OLD MAN INFECTED WITH THE HUMAN IMMUNODEFICIENCY virus (HIV) (CD4 count of 450 per cubic millimeter and HIV viral load of <50 copies per milliliter) who had HIV-associated dementia was admitted to our hospital because of an altered mental status, a temperature of 101°F (38.3°C), and seizure-like activity. His medications included efavirenz, emtricitabine, tenofovir, and pravastatin sodium. Empirical treatment with intravenous acyclovir (10 mg per kilogram of body weight) and antibiotics was initiated before the patient underwent a lumbar puncture. Two hours after the administration of acyclovir, his urine became cloudy and white in the proximal portion of the Foley catheter, with clear yellow urine distally. A urinalysis was remarkable for a specific gravity of 1.025 with a urinary pH of 5.0. Ketones, albumin, and blood were detected. Microscopical analysis revealed birefringent needle-shaped crystals (Panel A; visualized under polarizing light in Panel B), a finding consistent with the precipitation of acyclovir. His serum creatinine level increased from 0.7 to 1.1 mg per deciliter (62 to 97  $\mu$ mol per liter) and returned to the baseline level after the discontinuation of acyclovir and administration of 2 liters of normal saline. Additional treatment with intravenous acyclovir did not result in urinary crystallization of the drug. A lumbar puncture was unremarkable, and an infectious pathogen was not detected. It was concluded that the signs and symptoms on presentation were due to HIV-associated dementia and that the seizure-like activity was myoclonus. The patient was discharged to hospice care.

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