



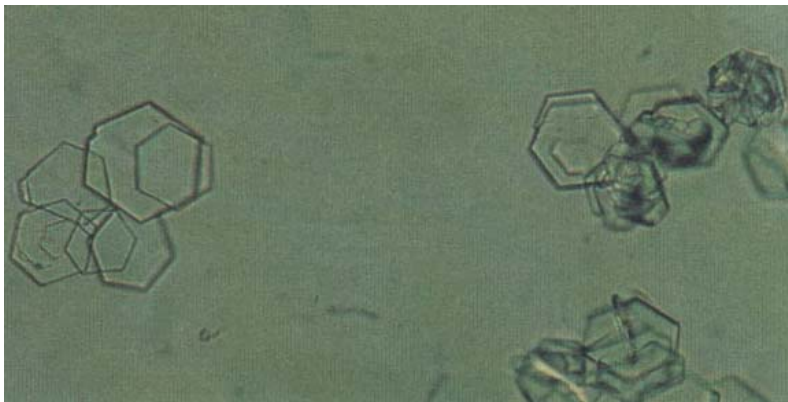
# HOLY C.O.W.!

## IT'S...

Clinical Question of the Week #16  
October 13th, 2008 through October 20th,  
2008

Please e-mail your answers to Kuo, Tim, Wendy, and Kevin ([klian@mednet.ucla.edu](mailto:klian@mednet.ucla.edu); [tprovias@mednet.ucla.edu](mailto:tprovias@mednet.ucla.edu); [wsimon@mednet.ucla.edu](mailto:wsimon@mednet.ucla.edu); [kbreger@mednet.ucla.edu](mailto:kbreger@mednet.ucla.edu)) by 0800 on Monday, October 20th, 2008. The resident or intern with the most correct answers at the end of each month will receive a prize!

**Case 1:** A 24-year-old man presents with nephrolithiasis. Examination of the urine sediment is shown below. You take the specimen to the clinical lab (RR B-403) where you and the tech alkalinize the sample, then add a few drops of sodium cyanide, followed by a few drops of sodium nitroprusside. After this, the specimen turns pinkish red.



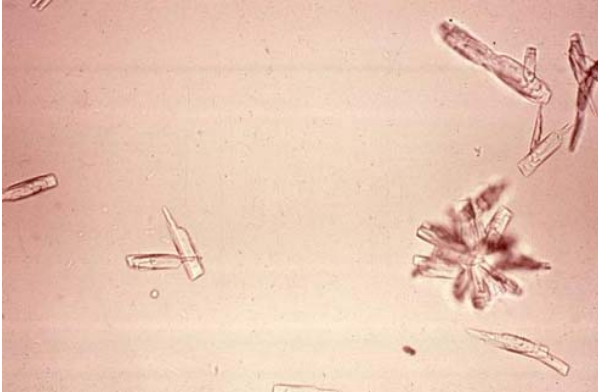
Case 1 urine sediment

**Case 2:** A 30-year-old woman with history of spina bifida presents to IMS with nephrolithiasis and recurrent urinary tract infections due to chronic indwelling urinary catheter. You take a specimen to the microscope for sediment analysis after spinning the sample. The urine sediment is shown.



Case 2 urine sediment

**Case 3:** A 63-year-old woman presents with gradual onset of abdominal pain and “achy bones.” She is also found to have nephrolithiasis as well as acute renal failure on evaluation. After spinning the sample in the clinical lab, you and your on call team look at the sediment, which is shown below.



Case 3 urine sediment

**Questions:**

1. **What is the diagnosis and stone composition in Case 1?**
2. **Name the stone composition in Case 2 and one associated infectious risk factor.**
3. **What is the diagnosis and stone composition in Case 3?**