

## CRYSTAL DISORDERS

Compiled by Dr. H. Ralph Schumacher  
(Updated Nov. 1998)

1. Moreland LM, Ball GV. Colchicine and gout. *Arthritis Rheum* 34:782-786, 1991.  
*Use of oral and intravenous colchicine is reviewed with guidelines to avoid severe toxicity.*
2. Kuncel RW, Duncan G, Watson D, et al. Colchicine myopathy and neuropathy. *N Engl J Med* 316:1562-1568, 1987.  
*The clinical, electrodiagnostic, and pathological findings of colchicine neuromyotoxicity are described.*
3. Feraz MB, O'Brien B. A cost effectiveness analysis of urate lowering drugs in nontophaceous recurrent in gouty arthritis. *J Rheum* 22:908-914, 1995.  
*Treatment with urate lowering drugs is cost saving in patients having 2 or more attacks per year.*
4. Hande KR, Noone RM, Stone WJ. Severe allopurinol toxicity. Description and guidelines for prevention in patients with renal insufficiency. *Am J Med* 76:47-56, 1984.  
*A specific schedule for adjustment of allopurinol dose based on creatinine clearance is provided.*
5. Hollander JJ, Van Saase J, Koote E et al. Beneficial effects of conversion from cyclosporine to azathioprine after kidney transplantation. *Lancet* 345:610-614, 1995
6. Walz-LeBlanc BAE, Reynold WJ, MacFadden DK. Allopurinol sensitivity in a patient with chronic to phaceous gout. Success of intravenous desensitization after failure of oral desensitization. *Arthritis Rheum* 34:1329-1331, 1991.  
*Desensitization can allow allopurinol use after some allergic reactions.*
7. Calabrese G, Simmons HA, Cameron JS, et al. Precocious familial gout with reduced fractional urate clearance and normal purine enzymes. *Quart J Med* 277:441-450, 1990.  
*Familial gout may be on a renal basis.*
8. Agudelo CA, Weinberger A, Schumacher HR, et al. Definite diagnosis of gouty arthritis by identification of urate crystals in asymptomatic metatarsophalangeal joints. *Arthritis Rheum* 22:559-560, 1979.

*The definitive diagnosis of gout can be made in the interim between attacks. Reasons why crystals cause inflammation at some times but not others are still a puzzle.*

9. Siegel LB, Alloway JA, Nashel DJ. Comparison of ACTH and triamcinoloneacetone in treatment of acute gouty arthritis. *Sem Arth Rheum* 24:359-369, 1994.

*Systemic steroids in several forms are effective for acute gout. The steroids in this study required less repeat injections than ACTH.*

10. Ryan LM, McCarty DJ. Calcium pyrophosphate crystal deposition disease: pseudogout, articular chondrocalcinosis. *Arthritis and Allied Conditions*, twelfth edition, edited by McCarty DJ, Koopman WJ, Philadelphia, Lea and Febiger, pp1835-1855, 1993.

*A comprehensive review of CPPD crystal associated syndromes by the discoverer and his group.*

11. Rodriguez-Valverde V, Zuniga M, et al. Hereditary articular chondrocalcinosis. *Am J Med* 84:101-106, 1988.

*Familial CPPD disease has occurred in a variety of populations.*

12. Farm AG, Morava-Protznert J, Purcell C et al. Acceleration of experimental lapine osteoarthritis by calcium pyrophosphate microcrystalline synovitis. *Arthritis Rheum* 38:208-210, 1995.

*CPPD crystals are very common in OA knees. This study suggests that they may accelerate disease progression.*

13. Halverson PB, McCarty DJ. Clinical aspects of basic calcium phosphate crystal deposition. *Rheum Dis Clin N Am* 14:427- 439, 1988.

*The concept of basic calcium phosphate crystal-associated disorders with mixed apatite-like crystals is reviewed.*

14. Zakraoui L, Schumacher HR et al. Idiopathic destructive arthropathies: clinical, light and electron microscope studies. *J Clin Rheum* 2:19-17, 1996.

*Milwaukee shoulder syndrome is reviewed in the context of shoulder destruction in other large joints, rheumatic conditions. Data on clinical, radiographic, and pathologic findings are provided. Similar destructive arthritis occurs at other large joints.*

15. Schumacher HR, Reginato AJ. Atlas of synovial fluid analysis and crystal identification. Philadelphia, Lea and Febiger, 1991.

*A resource for photomicrographs of the less common and rare crystals.*