Dynamic Chiropractic

DIAGNOSIS & DIAGNOSTIC EQUIP

Gouty Arthritis: The Missed Diagnosis

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When a patient presents with extreme pain and edema in the great (or "big") toe with no recent trauma, the diagnosis of gouty arthritis is one of the first things that comes to mind. When a patient presents with an insidious onset of extreme pain and edema in the spine, gout is seldom considered as the cause. Up to 60% of initial attacks occur at the first metatarsophalangeal joint.[2]

Primary gout is a genetic disorder of uric acid metabolism leading to high levels of serum uric acid. High serum uric acid levels cause monosodium urate crystals to precipitate out of solution into a joint,[3] usually only one at a time, at least in the early stages of the disease.[2] The presence of urate crystals in a joint sets off an immune response which causes the body to attack the internal components of the joint, leading to extreme pain and eventually joint destruction.

Secondary gout (10% of cases) results from catabolism secondary to leukemias and certain other cancers, or decreased excretion of uric acid due to renal failure.[3] Uric acid rate of solubility is greatly affected by temperature,1 which is why the majority of cases present in a distal extremity. I believe the crystals also have a tendency to form on a roughened surface, such as a joint that has suffered from previous trauma, unreduced subluxation, or degeneration.

Symptoms include extreme pain, edema, and the production of heat. Signs include tophi deposits at the helix of the ears and high serum uric acid levels, not necessarily above the high range listed on a lab report. Levels over 6 mg/dL may be symptomatic.[2] My lab lists "normal" as between 2.3 and 8.5 mg/dL. History may reveal previous insidious episodes of pain and edema at a distal extremity; a high-purine diet; an excessive intake of alcohol (particularly beer); the use of diuretics: the use of aspirin; the low intake of water; a very reduced caloric intake (leading to catabolism); or a family history of gout.

The allopathic drug of choice for the treatment of gout is allopurinol. Although effective in reducing serum uric acid levels, my PDR lists over 30 adverse side effects, including abdominal pain, hepatitis, headache, kidney failure, hair loss, muscle disease and joint pain. The most common side effect is a sometimes fatal skin reaction4 in which one's skin peels off in sheets.

The natural approach to the treatment of gout includes counseling the patient on dietary changes, with a reduction of high-purine foods, increased consumption of water (at least 64 ounces per day), along with 12-16 ounces of cherry juice per day and the elimination of alcohol. Aspirin should be avoided, as it raises uric acid levels. Aleve may be substituted, as it lowers uric acid levels, but it can cause stomach problems. In the acute and chronic stages, ultrasound, heat, gentle chiropractic manipulative therapy and gentle soft-tissue massage are beneficial.

Foods to Avoid

- high-purine foods anchovies
- organ meats
- bouillon
- gravies
- seafood
- goose
- yeast (baker's and brewer's)
- sweetbreads

Restricted Foods

- foods with moderate purine content
- fish
- meat
- poultry
- asparagus
- beans
- lentils

Also Avoid the Following:

- diuretics
- alcohol
- niacin

Case Studies

1. In June 1999, a 28-year-old male reported to my office complaining of low back pain, which he rated between 8-9 on a 1-to-10 pain scale, with mild right posterior leg pain extending to his foot. He denied recent trauma; his history was unremarkable. Physical examination revealed a subluxated right sacroiliac joint, which was warm and edematous. The joint felt boggy with adjustments. I again treated him over the next two consecutive days, Afterward, he reported feeling approximately 50% better and without leg pain.

On his appointment the next day, however, he reported his low back was worse than ever, with a return of leg pain. Further examination revealed small tophi deposits at the helix of both ears. With further questioning the patient related that he was taking a dietary supplement containing ephedrine (a diuretic). I ordered a chemical screening to assess uric acid levels, which were reported back at 6.9 mg/dL. I treated him with ultrasound, heat and chiropractic manipulative therapy and advised dietary changes, discontinuance of the dietary supplement, and the consumption of at least 16 ounces of cherry juice per day. The patient returned in four days reporting that he felt much better, no longer had leg pain, and was able to tie his own shoes. I again treated him with chiropractic manipulative therapy, heat, soft-tissue massage and ultrasound. I advised that he continue with the dietary changes earlier prescribed. His problem resolved with this treatment.

2. In May 1999, a 47-year-old male presented to my office complaining of a severe migraine headache with nausea and upper neck pain. His history was unremarkable, other than a history of diabetes diagnosed seven years prior and a history of gouty arthritis at his extremities. He consumed moderate amounts of alcohol. Physical examination revealed subluxations in the upper cervicals and at his

CO/C1 articulations bilaterally. These joints were hot, edematous and without a clean cavitation when I adjusted them. This patient edematous, and without a clean cavitation when I adjusted. This patient was out of town for the following six days. When he returned, he reported that his neck pain and headache were only slightly better. I adjusted him, applied ultrasound to the upper cervicals, and ordered a chemical screening which reported a uric acid level of 7.0 mg/dL. By phone I advised dietary changes, cherry juice and the avoidance of alcohol. The patient was again out of town until one week later, when he reported that his neck was better and he had only a slight headache. I again adjusted, massaged, and applied ultrasound to his cervical spine and advised continuation of his dietary changes and avoidance of alcohol. His headache and neck pain resolved with this treatment, and I did not again treat him until March 2000, at which time he reported mild neck pain and a mild headache. A recent chem screen ordered by his medical doctor reported a uric acid level of 6.0 mg/dL.

References

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SEPTEMBER 2000