Therapeutics for Gout 2015

Diet:

Vegetarian

Low purines

Extra water

Eat lots of cherries

Juice: Celery stalks, cucumber, romaine lettuce, parsley, lemon

Some gout aggravating foods (purine rich) to avoid:

Anchovies, bouillon, consommé, dried legumes, goose, gravy, heart, herring, kidneys, liver, mackerel, meat extracts, mussels, mushrooms, organ meats, partridge, roe, sardines, scallops, shrimp, sweetbreads, yeast (bakers and brewers), yeast extracts.

Fructose increases uric acid.

Botanical/Nutritional therapies:

Vit C

Vitamin C competes with uric acid for the URAT1 receptor in the kidney for reabsorption. Through this mechanism, Vit C increases uric acid excretion, and lowers serum uric acid levels. When introducing Vit C into a patient with gout, it is a good idea to start slowly, and gradually increase the daily dose by 250-500mg, to reach a level just below bowel tolerance.

Quercetin

Quercetin is a flavonoid found in the skins of some fruits and vegetables, such as capers, onions, kale, and apples. It has an antihistamine like effect in the body, and can be a very useful part of the treatment of Gout. It is best absorbed orally, and doses should be in 1.5-2 grams daily taken in 3-4 divided doses.

Black Cherry concentrate - 1 tbsp 4-5 x day

TCM therapy

Acupuncture can be helpful for pain relief and for management of acute symptoms of gouty arthritis, but for long term management, internal medicine strategies should be employed.

Er Miao San, "Two marvel powder", is a TCM formula traditionally used in the treatment of gout.

ER MIAO SAN INGREDIENTS:

Huang Bai (Cortex Phellodendron)- 12-15 grams in decoction or 9 grams granule powder daily.

Cang Zhu (Atractylodis Rhizome) - 9-12 grams in decoction or 6-9 grams granule powder daily in 2-3 divided doses

Er Miao Wan teapills (MayWay) – 12-15 teapils 3 x day

Jade Mtn Botanical formula:

Colchicum (when available) 10 ml

Juniper seed 15 ml

Gravel Root 15 ml

Nettle seed 50 ml

Peony 20 ml

Turmeric 10 ml

Licorice 5 ml

3-5 droppers 3 x daily straight by mouth or in a little water

Pharmaceuticals:

Colchicum autumnale

The bulbo-tubers of *Colchicum autumnale* contain <u>colchicine</u>, a useful drug with a narrow therapeutic index. It has analgesic and diuretic properties that relieve gout pain, inflammation and edema, or water retention around affected joints.

Colchicine is approved by the FDA for the treatment of gout, and the plant has been used in small doses to prevent acute attacks of gout.

Allopurinol:

Allopurinol slows down liver metabolism and conversion to uric acid. Although it does not "flush" the uric acid out of the system, this effect reduces peak concentrations, maintaining a more steady uric acid level. It has been hypothesized that by limiting the peaks, the kidneys can keep up with demands.

Allopurinol has become the treatment of choice for Gout. This is not because of its efficacy, as necrolysis of the skin although rare is one of many serious and little known complications (Reported to me by Dr. Martin Lidsky MD, Department of Rheumatology, Houston VA and initial investigator of allopurinol for gout many years ago), but because it is more profitable a treatment. (Dr. Esaias I. Baca D.C.)

RESEARCH

A Chinese herbal medicine Ermiao wan reduces serum uric acid level and inhibits liver xanthine dehydrogenase and xanthine oxidase in mice

Abstract

Er miao san, which is composed of phellodendri cortex and atractylodis rhizome, is described as eliminating heat, excreting dampness and anti-edema prescription in traditional Chinese medical literatures including Danxi's Experiences in Medicine and State Pharmacopoeia of People's Republic of China. So it is being used clinically in the treatment of gout and hyperuricemia in China. In the present study, the water extracts of Ermiao wan and phellodendri cortex at 840 and 480 mg/kg/day orally for 7 days were demonstrated to possess in vivo potent hypouricemic effects both in hyperuricemic mice pretreated with oxonate and in normal mice, respectively. In the hyperuricemic animals, the effect of Ermiao wan was equal to that of the reference drug allopurinol (at 10 mg/kg/day orally for 7 days), but in the normal mice, the former was weaker than latter. In addition, both Ermiao wan and phellodendri cortex were found to have in vivo relatively inhibitory effects on mouse liver xanthine dehydrogenase (XDH) and xanthine oxidase (XO) activities at the same dose described above. These inhibitory effects were weaker than that observed for allopurinol. At actylodis rhizome at 340 mg/kg/day orally for 7 days did not show any effects on the above experiments. These results suggested that atractylodis rhizomes assisted and enhanced the effect of phellodendri cortex on reduction of serum uric acid level in hyperuricemic mice, and hypouricemic effects of Ermiao wan and phellodendri cortex may be achieved by other mechanism partly instead of the XDH and XO inhibition.