

## ***Gout Arthritis; There is effective treatment***

The following is a case study of a young 28 year old man recently referred to our practice because he experienced severe pain and swelling of his right big toe and instep. He had been to the emergency room a week earlier. An x-ray was normal. A uric acid level measured in his blood was normal at 5.2mg. [Upper limit of normal is 6.0mg]

He was given a course of prednisone for seven days which allowed him to return to work as a machine operator.

A week later his left foot became very painful and he returned to the emergency room again.

Another x ray was taken which was normal. The uric acid was measured and was normal at 5.7mg.

He was given an anti-inflammatory medication Indocin which caused stomach pain and heartburn.

He came to our office urgently using crutches. His left great toe was red, warm and swollen.



***See picture.***

Risk factors for gout arthritis include his family history; his father, older brother and uncle all have gout arthritis.

His diet is enriched in a high uric acid diet. He enjoys eating cold cuts every day for lunch and has about 16 beers a week.

This young man has many risk factors to develop gout arthritis.

These include not only his family history and diet but also the location of the severe joint pain.

Any joint can be affected but the big toe and instep are affected 95% of time in patients who have gout.

As this young man said I ' could have fried a chicken' on my toe it was so hot.

There is oversaturation of uric acid which deposits in the joint.

After the acute attack is over and the severe pain is gone, uric acid remains in the joint which can lead to permanent damage of the joint over time.

X-ray is not a good image to diagnose gout because it takes years for changes of gout to show.

Ultrasound or MRI is more sensitive and accurate to show uric acid and changes of gout.

Attached is an ultrasound picture of the toe showing the 'double contour sign' indicating uric acid in the joint? See the blue arrow.

About 30% of patients who present with an acute attack of gout will have a normal uric acid in their blood at that time.

This can be confusing for both the patient and practitioner.

This reason this occurs because there is mobilization of uric acid to the joint away from the serum.

The recommendations for the treatment of this patient are to use a medication for the acute pain and swelling.

This would include the use of colchicine for several weeks or possibly prednisone for a short period of time.

Once the acute pain has resolved medications that lower uric acid from the body are prescribed

This includes Allopurinol or Uloric.

Sometimes other medications provide a more effective result for patients with refractory gout.

This includes Lesinurad and Intravenous Krystexxa.

As in the management of Diabetes or High Blood Pressure.

Chronic Gout Arthritis is treated not only with dietary change but medication.

This long term treatment can lead to a significant reduction in flares as well as a possible 'cure'.