Poor Treatment Results in Gout: Unintentional Resistance?

June 13, 2014
By Rita Baron-Faust [1]

Failure to achieve urate targets in gout may have more to do with innate resistance or under-dosing than with poor adherence to the allopurinol regimen.

Source: Rheumatology Network


When gout patients don’t achieve target serum urate levels, it’s often blamed on non-adherence. But instead the real cause may be under-dosing of allopurinol (Zyloprim) or the body’s inability to properly metabolize the drug, say researchers from New Zealand.

The common therapeutic target in gout is a serum urate of under 0.36 mmol/l (or 6 mg/dL), but many patients never reach that level even when they stick with the standard dose of 300 mg a day or less of allopurinol -- or even with double that dose.

While studies indicate that less than half of gout patients adhere to their treatment regimens, as many as 80% of patients don’t reach serum urate targets because may be “partially resistant” to the xanthine oxidase inhibitor (XOI), the researchers speculate.

Possible mechanisms include reduced conversion of allopurinol to oxypurinol in the body, decreased uric acid excretion by the kidneys, or even abnormalities of XO itself that make the drug less effective.

Some clinicians may give lower doses of allopurinol to patients with renal impairment, but a subgroup of gout patients require doses over 400 mg a day because their bodies don’t absorb the drug properly for genetic reasons.

In other cases, patients may be taking medications for co-existing conditions such as hypertension (e.g. the loop diuretic furosemide) that interact with allopurinol. Those patients may need an alternate urate lowering drug such as febuxostat (Uloric).

Research by the same group has shown that more than half of gout patients can achieve the common therapeutic target with doses higher than of 450 mg of allopurinol a day.

Source URL:

Links: