ASSOCIATION OF RENAL DYSFUNCTION AND RESPONSE TO TREATMENT WITH PEGLOTICASE

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Background: Many, but not all patients with chronic refractory gout develop tophi, and the factors that govern tophus formation are not known. To address this question, we assessed subjects enrolled in the pivotal trials of pegloticase, a mammalian recombinant uricase conjugated to polyethylene glycol that is approved for the treatment of gout refractory to conventional oral urate lowering therapy.

Objectives: To identify factors associated with allopurinol adherence and SUA goal attainment in gout patients.

Methods: This analysis used results from two pivotal randomised controlled trials (RCTs)1,2 to assess the clinical characteristics of subjects with chronic refractory gout. This analysis included disease duration (>1 year) (odds ratio [OR] 0.1, 95% confident interval [CI]: 0.05–0.21), history of gout attack (>2 times/year) (OR 0.21, 95% CI: 0.1–0.42), and prescriber specialty (rheumatologist) (OR 2.64, 95% CI: 1.28–5.43). Factors associated achieved SUA goal in the multivariable analysis included history of gout attack (>2 times/year) (OR 0.21, 95% CI: 0.1–0.42), prescriber specialty (rheumatologist) (OR 2.64, 95% CI: 1.28–5.43), allopurinol dose escalation (>100 mg/day) (OR 2.02, 95% CI: 1.11–3.65), and allopurinol adherence (OR 13.6, 95% CI: 6.52–28.39).

Conclusions: Among patients with gout receiving allopurinol in our study, 70.8% were adherent, whereas only one-third of them achieved SUA target (29.2%). Factors associated with allopurinol adherence in the multivariate analysis included disease duration (>1 year) (odds ratio [OR] 0.1, 95% confident interval [CI]: 0.05–0.21), history of gout attack (>2 times/year) (OR 0.21, 95% CI: 0.1–0.42), pre-scriber specialty (rheumatologist) (OR 2.64, 95% CI: 1.28–5.43), and allopurinol adherence (OR 13.6, 95% CI: 6.52–28.39).

Disclosure of Interest: None declared

Reference:

FACTORS ASSOCIATED WITH ALLOPURINOL ADHERENCE AND TREATMENT OUTCOME AMONG GOUT PATIENTS

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Background: A serum uric acid (SUA) level of <6.0 mg/dL has been widely accepted as the therapeutic target for patients with gout. Recent studies implicate allopurinol nonadherence as a major barrier to achieving this target. However, factors that could affect this medication adherence are not clearly identified.

Objectives: To identify factors associated with allopurinol adherence and SUA goal attainment in gout patients.

Methods: This study identified patients aged 18 years or older with a diagnosis of gout by 1977 ARA classification criteria for gout, received at least 1 month of allopurinol, and attended out-patient clinics of Phramongkutklao hospital from Jul 2016, Sep 2017. Allopurinol adherence was defined as Medication Taking Behaviour for Thai patient (MTB-Thai) scores≥21 points. Patient characteristics, comorbidities, concomitant medications, prescriber specialty, number of gout attack and SUA were examined. Multivariate logistic regression was used to examine factors associated with allopurinol adherence and SUA target, defined as SUA <6.0 mg/ dL.

Results: A total of 226 patients with gout was included. Approximately half of patients (43.4%) were adherent, whereas only one-third of them achieved SUA target (29.2%). Factors associated with allopurinol adherence in the multivariate analysis included disease duration (>1 year) (odds ratio [OR] 0.1, 95% confident interval [CI]: 0.05–0.21), history of gout attack (>2 times/year) (OR 0.21, 95% CI: 0.1–0.42), prescriber specialty (rheumatologist) (OR 2.64, 95% CI: 1.28–5.43), allopurinol dose escalation (OR 2.11, 95% CI: 1.17–3.79), current allopurinol dosage (>100 mg/day) (OR 2.02, 95% CI: 1.11–3.65), and allopurinol adherence (OR 13.6, 95% CI: 6.52–28.39).

Conclusions: Among patients with gout receiving allopurinol in our study, 70.8% did not reach the SUA goal and 56.6% of patients were non-adherent. Allopurinol adherence was strongly associated with SUA goal attainment. The only modifiable factor associated with allopurinol adherence was prescriber specialty, whereas, modifiable factors associated with SUA goal attainment were prescription specialty, allopurinol dose escalation, and current allopurinol dosage. Appropriate dose escalation and rheumatology referral could be important factors to consider in efforts aimed at optimising gout treatment outcomes.

Disclosure of Interest: None declared

Notes:
Noted between the presence of renal dysfunction measured by eGFR and the frequency with which chronic refractory gout patients manifested tophi. Pegloticase treatment markedly decreased the tophus burden, but in this analysis did not improve renal function. These results suggest that renal failure may predispose patients to tophus formation, whereas the resolution of tophi in this analysis did not appear to improve renal function.

REFERENCES: