**INTRODUCTION**

- Gout is the most common form of inflammatory arthritis, affecting more than 40 million adults worldwide (1), with an estimated 3.9% prevalence in the adult US population (2).
- Gout is mostly managed outpatient by a primary care provider (PCP).
- We conducted a Quality Improvement (QI) project in our Internal Medicine Residency (IM) clinic involving increasing awareness, improving management and treatment optimization of gout patients.

**METHODS**

- Patients were identified with gout from January 2018 - October 2022 at our Community Hospital clinic by EMR search.
- We collected data on age, sex, race, BMI, number of gout flares, number of office visits, comorbidities, recent serum uric acid levels (SUA) and current diuretic use.
- We conducted an initial survey to identify barriers in gout management among residents.
- Resident intervention phase included flyers, emails on lifestyle modification, SUA monitoring, medication titration and follow up.
- Patient interventions included patient education, follow ups via telephone calls, pamphlet (figure 1) on medication compliance, diet and alcohol use.
- At the end of a 6-month period following the active intervention, the percentage of patients who achieved lowering of SUA, reduction in gout flare-ups and change in quality-of-life will be measured (using the Health Assessment Questionnaire Disability Index, HAQDI).

**RESULTS**

- In the pre survey 69% residents were not familiar with the American College of Rheumatology (ACR) guidelines and almost 50% were unaware of the target SUA level.
- However majority had a good grasp on history taking, dietary restrictions and follow ups.
- 44 patients had a diagnosis of gout between January 2018 - October 2022.
- Patient demographics were as shown in table 1. The serum uric acid levels ranged from 3.4 mg/dL to 11.8 mg/dL with a mean of 6.5 mg/dL (SD 1.9). The study showed that 19.2% of the population had around 1 flare per year of acute gout and about 9.6% had about 2 flares/year. There was no statistically significant difference in demographics or comorbidities in patients with and without gout flares. Latest SUA levels had moderately strong correlation with serum creatinine, but not with number of clinic visits per year, BMI or comorbidities.

**CONCLUSION**

Rheumatology access continues to be limited in the US and making a PCP comfortable with managing gout can help us in many ways. We found a knowledge deficit in our resident group, especially with medical management. Comorbidities and demographics in our study group did not predict flares in gout. The outcome measures of improvement in flares and reduction in SUA at the end of study period and resurveying the residents will give us further idea regarding the success of this project.

**REFERENCES**


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