Alexandria Journal of Medicine (2015) **51**, 121–125

HOSTED BY

ELSEVIER

Alexandria University Faculty of Medicine

Alexandria Journal of Medicine

http://www.elsevier.com/locate/ajme

ORIGINAL ARTICLE

Pitfalls in management of acute gouty attack, a qualitative research conducted in Makah Region – Saudi Arabia

Hamid Mustafa *

Umm Al-Qura university, PO Box 7607, Makkah, Saudi Arabia

Received 30 December 2013; accepted 16 April 2014
Available online 17 May 2014

KEYWORDS

Acute gouty attack;
Allopurinol;
Uric acid;
Guidelines

Abstract *Objective:* To probe doctors' attitudes and reveal wrong perception in the management of acute gouty attacks.
Design: A descriptive study using a designed questionnaire that was completed through face to face interviews in hospitals, health units and polyclinics in the Makah Region.
Method: This is a qualitative study of treatment by 99 doctors conducted in the second half of 2012. The sample included orthopedists, rheumatologists, general practitioners and family physicians.
Results: 72 (72.7%) doctors started treatment of acute attacks with mono-therapy. 58 doctors (58.6%) started with NSAIDs. Indomethacin was the most frequent prescribed NSAIDs. 18 doctors (18.2%) prescribed Allopurinol as the first drug of choice.
42 doctors (43.8%) started Allopurinol "2 weeks after acute attack". 31 doctors (32.3%) mentioned that they used 100 mg daily dose. 41 doctors (42.7%) mentioned that the starting dose depends on the patient's condition. Allopurinol was prescribed once daily by 37 doctors (38.9%). 53 doctors (55.8%) used Allopurinol as prophylaxis.
The most frequent test requested was a 24-h urine test for uric acid. In case patients were already on Allopurinol and presented with an acute attack of gout; 33 doctors (34.7%) tended to "increase the dose".
The most important factor in adjusting the Allopurinol dose is Serum Uric Acid Level. 37 doctors (39.4%) mentioned that they ask for Serum Uric Acid Level every 3–4 weeks.

* Mobile: +966 555991203.
E-mail address: drhmmmadani@yahoo.com

Peer review under responsibility of Alexandria University Faculty of Medicine.

http://dx.doi.org/10.1016/j.ajme.2014.04.004

Conclusion: There were common pitfalls that need a training program to increase awareness of doctors with general guidelines and recommendations. The most critical pitfalls include prescribing Allopurinol in acute gouty attacks and ignoring the Renal Function Test.

1. Introduction

Gout is a pathological and clinical disorder which is mainly characterized by hyperuricemia; which is an increase in serum urate levels of 7.0 mg/dl in men or greater than 6.0 mg/dl in women.[1,2] Tophi are a pathognomonic feature of gout detectable by physical examination and/or by imaging approaches and pathology examination.[3–5] Typically, the disease initially presents as acute episodic arthritis then manifests as chronic arthritis of one or more joints.[1,2]

Gout is one of the most common rheumatic diseases of adulthood, with a self-reported prevalence. In USA it was recently estimated as 3.9% of adults (~8.3 million people).[6] In Saudi Arabia, 8.42% of the study population had hyperuricemia but no case of gout was found.[7] Compared with women, men have a four- to nine-folds increased risk of developing gout.[8]

1.1. Treatment of acute attacks

The choice mainly depends on whether the patient has concomitant health problems or not (e.g.: peptic ulcer or renal insufficiency). There are various treatment options, such as corticosteroids, NSAIDs, ACTH and colchicine. Colchicine is now rarely used. An intra-articular steroid injection is preferred when an easily accessible large joint is involved and when comorbid conditions exist limiting the use of colchicine and NSAIDs. Reasonably septic arthritis must be excluded.[9–11]

Patients with no underlying health problems and having an acute gouty attack, are usually prescribed with NSAIDs as drugs of choice. Most NSAIDs can be used, however, indomethacin is the NSAID conventionally chosen for acute gout. An agent with a quick onset of action is selected. Aspirin is not recommended since it can lengthen and strengthen the acute attack, since it can change Uric Acid Levels.

1.2. Colchicine

Is now less commonly used than NSAIDs, due to its narrow therapeutic window and risk of toxicity. Although, it was once the treatment of choice for acute gout.[12,13]

1.3. Combination therapy

If the patient does not have an adequate response to initial therapy with a single drug, guidelines advice that adding a second appropriate agent is acceptable. Using combination therapy from the start is appropriate for an acute, severe gout attack, particularly if the attack involves multiple large joints or is poly-articular.[14]

1.4. Treatment of chronic gout

As first line pharmacological approach, guidelines recommend either Allopurinol or febuxostat with xanthine oxidase inhibitor therapy with gout patients who have renal disease.

Guidelines advice, however, state that mono-therapy in patients with creatinine clearance less than 50 mL/min with probenecid is not a first line choice,[15] since probenecid may also cause drug interactions.

1.5. Prophylaxis

Some drugs can alter the levels of tissue and serum uric acid, causing acute attacks of gout, such as probenecid, Allopurinol and febuxostat. Accordingly low dose NSAID or colchicine is given for 6 months at least in order to decrease this unfavorable effect. Low doses of prednisone are sometimes given when the patients cannot take either colchicine or NSAIDs.

1.6. Allopurinol

It should be started at a low dose of 100 mg per day, but can be titrated to 800 mg per day as necessary for a patient to achieve the target SUA level of 6.0 mg/dl.[16–18] It has been recommended that patients with renal impairment should receive lower doses. Allopurinol can be used in combination with probenecid. Stopping Allopurinol is not recommended during acute attacks.[19]

Aim of the study to probe doctors' attitudes and reveal wrong perception in the management of acute gouty attacks.

2. Methodology

This is a qualitative research in which 99 physicians were face-to-face interviewed through a structured questionnaire. Physicians were from the Makah Region – Saudi Arabia and essentially involved in gout management. Interviews were conducted in the second half of 2012.

The objective of the study is to describe physicians' prescribing habits in the treatment of gout and whether or not matching the general guidelines and recommendations.

The sample included orthopedists, rheumatologists, general practitioners and family physicians withdrawn from hospitals, health units and polyclinics.

3. Results

99 doctors were asked 17 questions about their experience with acute gout attack.

Table 1 shows treatment of choice; mono vs. combined therapy, first line of choice and first NSAID of choice.

The most common indication of initiating urate lowering agents in patients with acute gouty attack is Serum Uric Acid Level, mentioned by 67 doctors (68.4%) followed by the presence of Tophi (44–44.9%), history of Renal Stones (41–41.8%) and history of 2 or more severe attacks (36–36.7%). Less frequent indications are history of renal failure (28–28.6%),