Level of Agreement of the EULAR Recommendations in the Management of Gout to the General Practitioner in the City of Marrakech

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Abstract: Gout is one of the most common diseases in the population. Its management begins first of all with the general practitioner. This management has been the subject of recommendations by international learned societies such as EULAR (European League Against Rheumatisms). The objective is to evaluate the level of concordance between the management of gout in general practice and the EULAR recommendations. A questionnaire based on six fictitious clinical cases was mailed to 99 general practitioners in the city of Marrakech. Clinical cases have dealt with the treatment of the gout attack, hypouricemic treatments (dosage, prescribing procedures), treatment of secondary gout with diuretics and hygiene-dietetic rules. Our study involved 99 general practitioners based in Marrakech, either in the private sector or in the public sector. We had a response rate of 73%. For first-line treatment of gout access, 95% of physicians prescribe colchicine and/or nonsteroidal anti-inflammatory drugs (NSAIDs). In 8% of cases, oral corticosteroids were used. In the case of side effects to colchicine, 51% of general practitioners reduce the colchicine dose by half. The rest stops it and replace it with NSAIDs or analgesics. Regarding the prescription of allopurinol, 18% of doctors believe that it is systematic from the first access. To judge the efficacy of allopurinol, the intended biological threshold of uric acid was correct (uricemia <60 mg/l) in 71.20%. At initiation of treatment with allopurinol, 33% co-prescribed colchicine to prevent recurrence of the attacks. Finally, 75% of general practitioners advise on hygiene-dietetic rules. Treatment of gout is poorly consistent with EULAR recommendations.

Keywords: Gout, Treatment, Recommendations, EULAR, general practitioner

INTRODUCTION
Gout is a disease that is current because of its frequency and the problems of diagnosis and treatment that can still pose. To this end, EULAR has developed recommendations on diagnosis and therapeutic management. Our objective is to assess the level of concordance between the management of gout in general practice and these recommendations.

METHODS
We carried out a study with the general practitioners of the city of Marrakech. We have drawn up a questionnaire containing six clinical cases according to the EULAR recommendations, which we sent by post. Doctors are asked to respond anonymously and according to their habits. The level of concordance was established with the EULAR recommendations. The 2006 EULAR recommendations include twelve proposals for therapeutic management of gout, including treatment of gout attack, secondary gout, and dietary and hygiene measures.

RESULTS
We sent questionnaires to 99 general practitioners in the city of Marrakech. We received 73 responses. The response time was 3 weeks on average. For each recommendation, the results were as follows:

Recommendation
Patient education and warning about certain hygiene rules (weight loss, diet, reduction of alcohol consumption and especially beer) are key elements of the management of the patient.
Ninety-two percent of doctors advise their patients to lose weight. A diet low in purines is recommended by 82% of doctors. Seventy-seven percent of them advocate regular physical activity and a reduction in beer consumption by 78% of general practitioners.

**Recommendation**

Oral colchicine and / or NSAIDs are first-line treatments for acute attacks; In the absence of contraindication, the use of an NSAID is a therapeutic option with a good benefit / risk ratio.

Oral colchicine is prescribed first-line in acute access by 95% of doctors, to 26% of doctors it is prescribed alone. Colchicine is associated with either analgesics, prednisone or allopurinol to 69% of physicians. It is also noted that prednisone is used by 8% of physicians practitioner and that allopurinol is prescribed to the patient in first-line acute phase by 7% of doctors.

**Recommendation**

High-dose colchicine with frequent adverse effects, a low dose (eg 0.5 mg three times / day) may be sufficient for some patients to treat attacks.

In the case of side effects of colchicine, 51% of physicians proposed to decrease the dosage of colchicine while 49% of doctors proposed to stop it.

**Recommendation**

Uric-inhibitor treatments are indicated in patients with recurrent attacks, gouty arthropathies, tophus or radiographic signs of gout.

These indications of the uric-inhibitor treatment are known by 8.5% of doctors. While 18% of physicians think it is systematic from the first attack.

**Recommendation**

The therapeutic objective under uric-inhibitors is to promote the dissolution of crystals and to prevent their formation; This is achieved by keeping the uric acid level below the saturation point of the sodium urates, that is less than or equal to 360 micromol / L or 60 mg/L.

Under uric-inhibitors, 71.20% of physicians have a therapeutic objective of serum uric acid level less than or equal to 60 mg / l.

**Recommendation**

Preventing gout attacks recurrences in the first few months of initiation of uric-inhibitors therapy may be based on coprescription of colchicine at a dose of 0.5-1 mg per day and / or NSAID (With gastroprotection if necessary).

In order to prevent recurrences of gouty attacks, 33% of doctors proposed the combination of allopurinol and colchicine, while 8% of doctors proposed the combination of allopurinol and NSAIDs. Thus, 41% of physicians advocate preventive treatment based on colchicine or NSAIDs. However, 44% of physicians recommend allopurinol alone.

**DISCUSSION**

Gout is undoubtedly the oldest individualized rheumatologic condition, and our knowledge of this disease has increased remarkably over the past few years and continues to accumulate [1]. Classification criteria have been proposed since the 1960s, based mainly on the semiology of acute gout and the identification of crystals. The ROME criteria established in 1963 [2], NEW YORK 1968 [3] and those of the American Rheumatism Association (ARA) in 1977 [4] were used. The most recent recommendations are those of EULAR in 2006 [5]. In our survey, these recommendations were not entirely consistent with the practice of general practitioners. In fact, for the treatment of the gout attack, Colchicine is prescribed first-line by the vast majority of practitioners and NSAIDs by almost half of them, but the problem is the association of colchicine with prednisone or with allopurinol from the first gout attack. We also noted a large use of analgesic either alone or most often in combination. It seems to us that the discrepancy between the practices and the recommendations can be explained by a willingness of the practitioner to quickly relieve the patient by a co-prescription of symptomatic type of analgesic, prednisone or even the allopurinol. In the study by Rozenberg and al [6], the authors found that colchicine was prescribed alone in 63% of cases for acute attacks, NSAID-associated in 31.7% of patients. Another study in the United States found that 48% of patients were treated with NSAIDs, 21% with colchicine and 18% with glucocorticoids in the Gouty attack phase [7]. In the case of mild and regressive side effects of colchicine, a reduction in dose is preferred, this has been proposed by almost half of the practitioners. The rest of the general practitioners preferred, as a precaution, stop the drug causing the secondary side effect and replace it with another NSAID treatment, analgesic or allopurinol. Hypo-
uricemic therapy is indicated in patients with recurrent seizures, arthropathies, tophus or radiographic signs of gout. In our survey, the recommendations were not entirely consistent. The hypo-uricemic treatment is systematically prescribed by general practitioners in 40\% of cases, and from the first attack in 31\% of cases. This can be explained by the doctor's concern to recommend a hypo-uricemic treatment to balance the patient from the beginning and prevent further seizures, underestimation of the risk of side effects and toxicity of hypo-uricemic treatment or an urgent request from the patient, especially those who refuse to do the recommended diet. In a study in the United States [8], Wall and al found that for 50\% of general practitioners, the indication of hypo-uricemic treatment is consistent with the recommendations. Another study in the United Kingdom found that 49\% of patients with recurrent gout attacks and 60\% of them with tophus receive hypo-uricemic treatment, so Roddy and al concluded that allopurinol is prescribed only for a minority of patients during primary care [9]. According to EULAR recommendations, the therapeutic goal is to promote the dissolution of crystals and to prevent the formation of crystals, maintaining uricemia below 360 micromol / ml or 60 mg / l [10]. In our study, the majority of physician practices are consistent with this recommendation. A study in the United Kingdom [11] found that uricemia rates in patients receiving hypo-uricemic therapy type allopurinol is significantly lower than in patients in whom hypo-uricemic therapy is indicated but not taken, Uricemia was below 60 mg / l. To prevent recurrences of gouty attacks, only 38\% of our doctors have a behavior to be consistent with the recommendations. Colchicine, for prophylactic purposes, is more frequently prescribed than NSAIDs in our study, contrary to data from the literature. Studies in the United Kingdom and Germany showed that colchicine was used much less frequently (16\% in the UK, 15\% in Germany) than NSAIDs were prescribed in 89.4\% (United Kingdom) and 80.3\% (Germany) of oral patients for prophylaxis [11]. Another study in the United Kingdom has shown that only 25\% of patients taking allopurinol use prophylactic colchicine and / or NSAIDs [9]. Diuretics, widely prescribed in the community, are a common risk factor for gout. Depending on their indication, it may be possible to stop them, or switch to an alternative medicine not containing a diuretic [10]. We found that the majority of physicians advocate the discontinuation of diuretic therapy in gouty patients with associated hypertension. Concerning the prescription of losartan and fenofibrate, a minority of doctors recommend it. In the United Kingdom, treatment with diuretics in gout patients was interrupted in 64\%. There is a general agreement that gout education improves the outcome either directly by reducing uric acid or indirectly through their effects on correcting bad habits in the lifestyle. In a review of general practice in the United Kingdom, Pal and al found that advice on alcohol consumption and diet were proposed to 30\% of patients [9]. While in our study, general practitioners often advocate rules for lifestyle especially with regard to weight loss and poor purine diet. Finally, our study is the first study of this kind in Morocco, which made it possible to evaluate the practice of management of gout by the general practitioners. With a high response rate of 73\%. Nevertheless, our study has some limitations, indeed it was carried out on the basis of a questionnaire and therefore shows only an intention to take charge. In addition, the doctors received the questionnaire by mail with a response time of 3 weeks, so the doctor had more time to mature his reflection on a written document. The results are therefore probably better than in reality. A prospective study would have provided a more accurate estimate of physician practice, but this type of study has a lower response rate. Numerous questions remain unresolved following this study, in particular concerning the diagnosis of gout by the general practitioner. Also to know when should the general practitioner refer a gouty patient to a specialist.

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REFERENCES


