The Treatment of chronic idiopathic urticaria with Fexofenadine and Hydroxyzine Hcl in Libyan patients.

Abstract

Introduction: Chronic idiopathic urticaria characterized by short-lived circumscribed erythematous, edematous and itchy wheals usually lasting for a few hours to few days for a period of at least six weeks or more, without an identifiable causes and its negative influence on the quality of life. It's a disabling affliction that considerably limits patients' daily activities.

Fexofenadine hydrochloride is a carboxylated metabolic derivative of terfenadine and third generation selective histamine H1-receptor antagonist with non-sedative effects. Hydroxyzine Hcl (Atarax) is a antihistamine H1 blocker with anticholinergic and sedative properties and relieving the symptoms of allergy..

Objective: To access efficacy and safety of a combined administration of the Fexofenadine and Hydroxyzine Hcl in the treatment of chronic idiopathic urticaria.

Patients and Methods:

In this study was conducted in 48 Libyan patients, the mean age was 37 years (21-65 years). 22 females and 26 males, all patients with a diagnosis of chronic idiopathic urticaria, the average duration of the disease was 6months (4-10months) during the time period from January 2016 to December 2016. All our patients were investigated and examined to rule out any causes.

The patients were received fexofenadine 120mg per daytime and hydroxazine 25mg at bedtime for 3 weeks.

Result: The a combination of fexofinadine and Hydroxyzine provides to be effective against urticarial symptoms in our forty-eight patients with idiopathic chronic urticaria (good response in 16patients (33%) and very good response in18 patients (37,5%) satisfactory in 8 patients(17%) and in 6 patients(12,5%)unsatisfactory). Good tolerance of a combination fexofinadine and Hydroxyzine in our patients was reported.

Conclusion: The a combination of fexofenadine and hydroxazine appears to be an effective and safety treatment of chronic idiopathic urticaria that improves urticarial symptoms and quality of life. And might benefit patients who do not respond to single anti-allergic drug.

Keywords: Fexofenadine, Hydroxyzine, Chronic idiopathic urticaria, Quality of life.

Introduction: Chronic idiopathic urticaria characterized by short-lived circumscribed erythematous, edematous and itchy wheals usually lasting for a few hours to few days for a period of at least six weeks or more, without an identifiable causes and its negative influence on the quality of life. It's a disabling affliction that considerably limits patients' daily activities.

Chronic idiopathic urticaria is defined by the almost daily presence of urticaria for at least six weeks without an identifiable cause. Symptoms include short-lived wheals, itching and erythema. There is limited data available comparing the effects of fexofenadine with other antihistamines in chronic idiopathic urticaria. The aim of this study was to evaluate the efficacy and side-effects of the combination fexofenadine and hydroxazine in patients with chronic idiopathic urticaria..(6-12).

Fexofenadine hydrochloride, the major active metabolite of terfenadine, is an antihistamine with selective H1-receptor antagonist activity. Both enantiomers of Fexofenadine hydrochloride displayed approximately equipotent antihistaminic effects. Fexofenadine hydrochloride inhibited antigen-induced bronchospasm in sensitized guinea pigs and histamine release from peritoneal mast cells in rats(9-11).

The clinical significance of these findings is unknown. In laboratory animals, no anticholinergic or alpha1-adrenergic blocking effects were observed. Moreover, no sedative or other central nervous system effects were observed. Fexofenadine does not cross the blood-brain barrier.

fexofenadine hydrochloride is a carboxylated metabolic derivative of terfenadine and third generation selective histamine H1-receptor antagonist with antihistaminic and non-sedative effects. Fexofenadine competitively binds peripheral H1-receptors, thereby stabilizing an inactive conformation of the receptors.

Fexofenadine hydrochloride is a nonsedating long-acting antihistamine with highly selective peripheral H1 receptor antogonist activity and a 120 mg once daily dose showed optimum effects in chronic urticaria. (1) (12).

Hydroxyzine Hcl (Atarax) is a antihistamine with anticholinergic and sedative properties and relieving the symptoms of allergy that works by blocking histamine receptors, thereby stopping the actions of histamine.

In this study was conducted in 48 Libyan patients, the mean age was 37 years (21-65 years). 22 females and 26 males, all patients with a diagnosis of chronic idiopathic urticaria, the average duration of the disease was 6 months (4-10months) during the time period from January 2016 to December 2016. All our patients were investigated and examined to rule out any causes.

The patients were received fexofenadine 120 mg per daytime and Hydroxyzine 25mg at bedtime for 3 weeks.

Objective: To access efficacy and safety of a combination the Fexofenadine and Hydroxyzine Hcl in the treatment of chronic idiopathic urticaria.

Patients and Methods: In this prospective study was conducted in 48 Libyan patients the mean age was 37 years (21-65 years),(Fig:2). 22 females and 26 males (Fig:1).all patients with a diagnosis of chronic idiopathic urticaria, the average duration of the disease was 6months (4-10months) during the time period from January 2016 to December 2016.(Fig:3). All our patients were investigated and examined to rule out any causes. The patients were received fexofenadine 120mg per daytime and hydroxazine 25mg at bedtime for 3 weeks with following up at 0, two and three weeks for response to treatment.

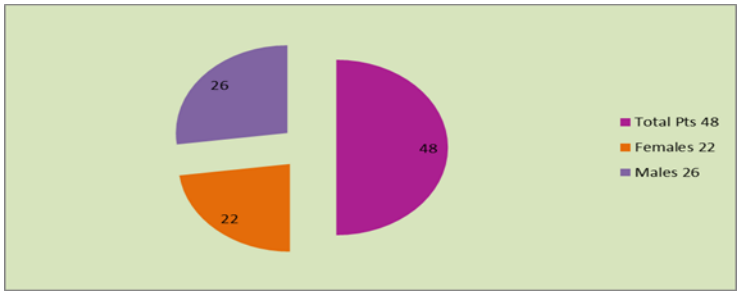

Figure: (1). Total Patients

According to our present work we are selected those patients who have had normal standard routine investigations according to chronic idiopathic urticaria.
Pregnant women, lactating mothers and abnormally laboratory findings were excluded.
All our patients were included in this present study had only chronic idiopathic urticaria without any other illness nor abnormal laboratory results.

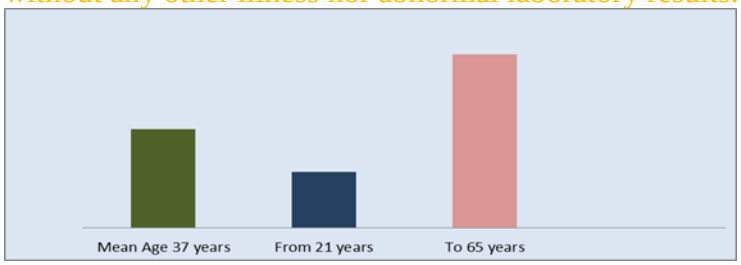

Figure: (2). Mean Age 37 years.

A general and systemic examination was conducted and their consent was obtained at the initial visit.

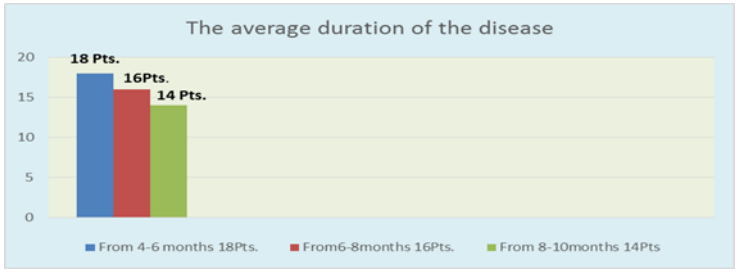

Figure: (3). Disease duration and number of patients

Result:
Combined administration of fexofinadine and Hydroxyzine Hcl provides to be effective against urticarial symptoms in our forty-eight patients with idiopathic chronic urticaria (good response in 16 patients (33%) and very good response in18 patients (37,5%) satisfactory in 8 patients(17%) and in 6 patients(12,5%)unsatisfactory) (Fig:4). Good tolerance of a combination fexofinadine and Hydroxyzine in our patients was reported.

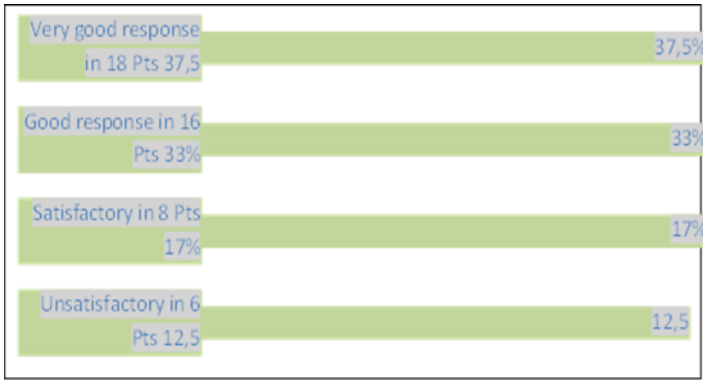

Figure: (4). Response to the Treatment

Adverse event that is usually mild and transient and did not require the drugs withdrawal (sleepiness in 14 patients.(29%) (Fig:5). Combined administration of fexofinadine and Hydroxyzine can be recommended for chronic idiopathic urticaria and wide application in therapy of allergic diseases.

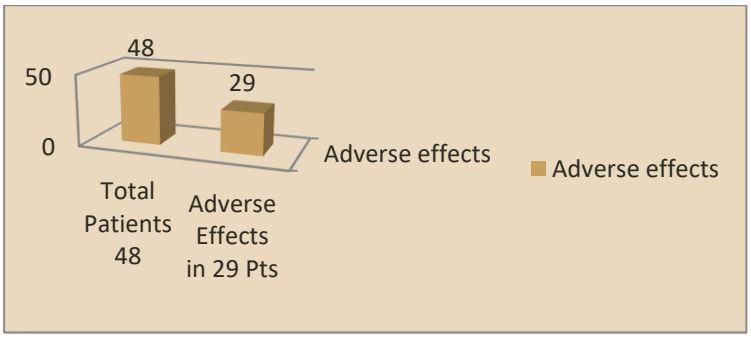

Figure: (5). Adverse effects

Discussion:

Chronic idiopathic urticaria is defined by the almost daily presence of urticaria for at least six weeks without an identifiable cause. Symptoms include short-lived wheals, itching and erythema. There is limited data available comparing the effects of fexofenadine with other antihistamines in chronic idiopathic urticaria. (12). Additionally, Urticaria is a cutaneous syndrome characterized by dermal edema (wheal) and erythema (flare) that blanches with pressure. The lesions typically last less than 24 hours and are usually pruritic. In 1983, Christensen and Maibach summarized the theory behind the use of histamine H1 receptor antagonists (antihistamines) in clinical dermatology. These agents remain the mainstay of treatment for urticaria.

In accordance to our preset study has shown at the end of the third week of this combination therapy has shown the decrease in urticarial lesions: was 87.5% (a good responded in 16 patients (33%) and very good response in18 patients (37,5%) satisfactory in 8 patients(17%) in this combination therapy. Therefore, fexofenadine and atarax treatment was decreased urticarial lesions significantly. No patient could stop treatment before three weeks of treatment.

Even so, in other single anti-allergic study, was a randomized, double-blind, placebo- controlled, parallel, multicenter research has shown the hydroxazine25 mg once daily at bedtime, is an effective treatment for Chronic idiopathic urticaria, characterized not only by a rapid and sustained response, but also by an important improvement in Quality of life. (2).

However similarly fexofenadine 120 mg once daily is well tolerated and is statistically superior to placebo in reducing signs and symptoms of Chronic idiopathic urticaria and in ameliorating interference with sleep and daily activities due to urticaria. However, our results are in accordance with some previous single anti-allergic therapy studies.(13- 19). Whereas Day JH, Briscoe MR Welsh A, et al. were demonstrated that fexofenadine HC1 at a single daily oral dose of 120mg is an effective non-sedating antihistamine for the treatment of Chronic idiopathic urticaria and is devoid of any significant adverse effect including cardiotoxicity.(8).

So far there is not much published data available on 120mg fexofenadine molecule. Most of the studies address the efficacy and safety parameters of fexofenadine in seasonal allergic rhinitis and asthma.

Despite of in our study majority of the patients were between 25 to 55 years of age

and males outnumbered females, it is in corroboration with the earlier observations that chronic idiopathic urticaria mostly affects adults and males (3.5).

In other hand combination of sedating and non-sedating H1 receptor antagonists are more effective in controlling the pruritus than the wheals, there agrees with our study. (6,7,8,9).Whereas a review of the literature reveals that there are few studies which document the efficacy of first and second-generation antihistamines in the treatment of urticaria, a biologic entity that usually resolves within 3-4 weeks. We did not identify controlled studies that suggested superiority of any antihistamine in the treatment of urticaria.(20,21,22).

However in our present study the drug controlled the pruritus and wheals, effectively at the end of the third week the decrease in urticarial lesions activity was 87.5%, (good response in 16 patients (33%) and very good response in18 patients (37,5%) satisfactory in 8 patients(17%). Combined administration of Fexofenadine and atarax in the treatment of chronic idiopathic urticaria was significantly decreased activity of urticarial lesions and symptoms, whereas no patient could stop treatment before third week of treatment. This was in corroboration with the study by Paul et al.(1), and this agrees with our present work.

Adverse effects were analyzed that is usually mild and transient and did not require the drugs withdrawal (sleepiness in 14 patients)(29%).(9-10).

In fact, Our study found the combination of fexofenadine and hydroxazine superior to mono-therapy at the end of the third week in treatment of chronic idiopathic urticaria. Nevertheless, There are no studies comparing the combination fexofenadine and hydroxazine in treatment of Chronic idiopathic urticaria . Large studies are required to confirm these findings.

Conclusion: The a combination of fexofenadine and hydroxazine (Atarax) appears to be an effective and safety treatment of chronic idiopathic urticaria that improves. urticarial symptoms and quality of life. And might benefit patients who do not respond to single anti-allergic drug.

However, Antihistamines are the mainstay of urticarial therapy. This evidence-based review suggests that there are efficacy differences between newer, non-sedating antihistamines and older agents in some forms of the disorder. Clearly, further well-controlled clinical trials in larger numbers of patients are needed to clarify the role of these agents in the treatment of urticaria.

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