A REVIEW ON URTICARIA AND ITS TREATMENT

RITIKA SHARMA[1], DR.PARDEEP GOYAL[2]

UNIVERSITY INSTITUTE OF PHARMACEUTICAL SCIENCES, CHANDIGARH UNIVERSITY, GHARUAN(Mohali)

EMAIL ID: sharma.ritika88@gmail.com

Urticaria is a heterogenous group of disease having various subtypes. It is the fourth most ubiquitous allergic disease which affects 20 percent of total population once in a life time. It is a fading redness and swelling of skin with itching, causing wheals in the dermis or large hypodermal swellings.it is a lumpy itchy rashes which look like the effect of nettle sting and occurs for more than six weeks. Urticaria can occur on the any part of the skin. the lesions are round to polymorphic and can rapidly grow and coalesce. It can be classified as acute and chronic. In acute urticaria, wheals resolve within hours and can recur for up to six weeks. In chronic urticaria, flares recur more days than not for more than six weeks.

Urticaria occurs across all age ranges and has a lifetime prevalence of approximately 20 percent in the general population with the chronic form affecting one percent of the population. Urticaria is more often in female patients among 35-60 years age group. Autoimmune disturbances are present in 40-45 percent of patients with chronic spontaneous urticaria.

ETIOLOGY

In urticaria histamine and other mediators are released from mast cells and basophils. Release is mediated by I_gE immunoglobulin. The exact mechanism of action and significance of these antibodies remain unclear. In patients with acute urticaria triggers can be identified however specific trigger is found in 10-20 percent of chronic cases. Common triggers include allergens, food or food additives that contain histamine or that may cause the release of histamine directly such as strawberries, tomatoes, preservatives and colouring agents. Medications specifically from antibiotics by direct mast cells degranulation by specific medicine including Aspirin, NSAIDs, opiates etc. table 1 shows causes of urticaria.

DIGNOSIS AND EVALUATION

The condition is diagnosed primarily by history and physical examination. The aim of diagnostic measure is to :

- Identify urticaria type and subtype.
- Identifying underlying causes.

Urticaria if either acute or chronic type is a common disease that manifests with heterogenous phenotypes. Patient should be asked about timing and onset of symptoms .a physician should perform a complete review of systems. AU is more common than chronic form and is associated with a rapid recovery, but the identification of its etiology can be helpful. In chronic urticaria there is a complete blood count with differential and measurement of erythrocyte sedimentation rate or C reactive protein level to test for infection, atopy and systemic illness. Where as measurement of TSH level, LFT and urinalysis are variously recommended.

Table -1 Classification of Urticaria subtypes based on different eliciting stimuli

Types	Subtypes	definition and Causes
Spontaneous Urticaria	Acute spontaneous urticaria	wheals <6 weeks
	Chronic spontaneous Urticaria	wheals >6weeks
Urticaria incduced by physical agents:		
	Cold contact urticaria	wind/ Cold object/fluids/air.
	Delayed pressure urticaria	vertical Pressure .
	Heat contact urticaria	localized Heat.
	Solar urticaria	UV/visible Light.
	Demographic urticaria	mechanical shearing forces
	Vibratory urticaria	vibratory forces
Other inducible urticaria:	Aquagenic urticaria	water
	Cholinergic urticaria	by increase of core body Temperature due to physical Exercises, spicy food.

	Contact urticaria	urticariogenic substance

TREATMENT

The main aim of the treatment is to treat known triggers. Patients are advised to avoid aspirin, alcohol and possibly non-steroidal anti-inflammatory drugs because these can worsen the disease. However anti-histamine medications are first line pharmacotherapy. A variety of additional medications can be used when first line anti histamines are not adequate.

Acute symptoms

Nonetheless , histamine H_1 blockers are the first line therapy for acute urticaria. This also includes second generation agents such as loratadine, desloratadine, levocetirizine, cetirizine and fexofenadine which are non-sedative when dosed once in a day. However first generation antihistaminic such as diphenhydramine, chlorpheniramine, cyproheptadine are faster acting but require more faster dosing and have more adverse effects which include drowsiness, confusion, dizziness, impaired concentration and decreased psychomotor performance. Addition of H_2 blockers to the therapy with H_1 blockers will b beneficial for acute symptoms.

Chronic urticaria

Second generation antihistamines are first line therapy. If symptoms remain uncontrolled, there are many options. First generation antihistamines may be added ,especially at night. There are data on effectiveness of leukotriene receptor antagonists such as montelukast and zafirlukast in the treatment of chronic idiopathic urticaria specially in patients with cold urticaria. A stepwise approach to treat chronic urticaria is given below:

Chronic Urticaria Treatment

Week 1	Start second generation antihistamine(H_1 blocker)
Week 3	Titrate second generation antihistamine to two to four Times normal dose.
Week 7	Switch to different second generation antihistamine Or Consider adding one of the following: - H_2 blocker - First generation antihistamine at night. - Leukotriene receptor antagonist. - Brief burst of oral corticosteroids.

If sufficient control still is not achieved, second line agents including cyclosporine, sulfasalazine, tacrolimus and dapsone have shown some benefits. After symptoms are controlled adequately, patients should be maintained at regimen for at least three months before discontinuing medications.

PROGNOSIS

A systematic study has shown that 35 percent of patients with chronic urticaria will be symptom free with in one year. Spontaneous remission occurred with in three years in 48percent of patients with idiopathic chronic urticaria, but only 16 percent of those with physical urticaria.