# HELICOBACTER PYLORI AND CHRONIC URTICARIA

#### **THESIS**

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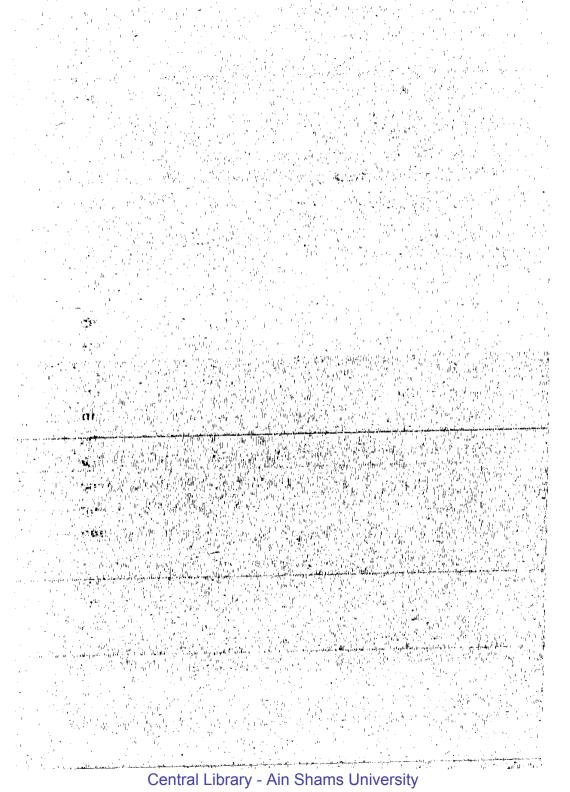


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### INTRODUCTION

# AND

### AIM OF THE WORK



#### INTRODUCTION AND AIM OF THE WORK

Urticaria (the hives, nettle rash and cnidosis), is a vascular reaction of the skin characterized by the appearance of wheals which are elevated, whitish or reddish evanescent plaques, generally surrounded by a red halo or flare and associated with severe itching, stinging, or pricking sensation. These wheals are caused by localized edema (Andrews, 1990). The edema is due to the extravasation of protein-rich fluid from small blood vessels and is a reflection of increased permeability of the vessel wall (Katz H.I. 1975). Urticaria may be acute or chronic and also may have special forms (Andrews, 1990).

Urticaria poses a constant challenge to physician, it is experienced by 15 to 20% of the population at least once in their life time (Sheldon J.M. et al., 1954). Fortunately, most episodes are acute, last from a few days to few weeks and in these the etiology is often detectable. Chronic urticaria however, can be more debilitating and frustrating and cause is not found in over 75% of cases (Champion R.H. et al., 1969).

Chronic urticaria is termed, when urticaria recurs daily or most of days over a six or more weeks period. Finding the cause challenges not only the physician but also the patients, who must search for a cause in their daily

exposures and endure discomfort throughout efforts at testing for the cause and finding efficacious medication for the relief of symptoms (Andrews 1990).

Patients who present with hives are often hoping their physician can tell them what caused the condition. In acute cases, this is often possible and the condition is usually self limited, but unfortunately, the majority of chronic cases are idiopathic. Chronic urticaria is occasionally a symptom of of a more serious underlying disease so it is important not to miss any associated systemic illness and it is best to warn patients with chronic urticaria that they may be dealing with this condition for 1-2 years so that they know not to expect an immediate resolution (Sveum R.J. 1996).

These patients suffer serious disability in social and economic terms (Champion R.H. et al., 1969). Most of the causes of urticaria listed in current textbooks of dermatology may be pertinent to acute but not to chronic urticaria (Hide M. et al., 1994). In chronic urticaria much effort and expense are frequently expended in check list and search for the numerous etiologic and contributory factors that have to be identified. Among these factors physical urticaria is frequently identified in patients who present with chronic urticaria (Sibbald R.G. et al., 1991). Champion 1988 noted, physical urticaria in 20% of 2.310 patients with chronic urticaria while, Small et al.(1982), observed

physical urticaria in 26% of 231 patients with chronic urticaria and angiodema.

It has been hypothesized that cases of chronic urticaria may be due to autoimmune disease (Matthews K.P. 1981). Leznoff et al., 1989 have recently found that 14% of patients with chronic urticaria had evidence of thyroid autoimmunity, others have assessed anti IgE autoantibodies in urticaria (Gruber B.L. et al., 1988), and other evidence of an immunologic response (Chodirker W.B. et al., 1979 Oehling A. et al., 1979 and Small P. et al., 1982). Further implicated factors include dietary factors, medications, such as acetyl salicylic acid, infections and psychological stress (Champion R.H. et al., 1969 and Juhlin L. 1981).

Together with antihistaminics, various antibiotics including penicillin, tetracycline and others have been empirically used to treat chronic urticaria in an attempt to eliminate an underlying focal infection. On the basis of this knowledge, we posed the question as to whether Helicobacter pylori infection could be an underlying cause of chronic urticaria. (Graham D.Y. et al.,1987 and Eggers R.H. 1990). Helicobacter pylori, a microaerophilic gram negative bacterium, is the major cause of gastritis, plays a key role in the etiology of peptic ulcer and is a risk factor for gastric cancer. Although 50% of the population is affected, dermatologists seem to be unaware of the impact

Helicobacter pylori may have on cutaneous pathology. Among skin diseases Helicobacter pylori has been related so far only with chronic urticaria and rosacea (*Rebora A. et al.* 1995).

Recently, several reports have been describing a possible relation between Helicobacter pylori infection of the gastric mucosa and dermatological diseases. Associations have been reported for urticaria, rosacea, Sjögren's syndrome and Schönlein Henoch purpura ( *Tebbe et al.*, 1996).

As infection is one of the contributing factors in chronic idiopathic urticaria and Helicobacter pylori has recently been observed to be related to chronic urticaria patients, the aim of this study is to assess the prevelance of Helicobacter pylori among patients with chronic urticaria.

## REVIEW OF LITERATURE

