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PROGNOSTIC VALUE OF IMMUNOSTIMULANT DRUGS IN
BILHARZIAL PATIENTS WITH GENERALIZED OBSTRUCTIVE
AIRWAYS DISEASE AND IN PATIENTS WITH GENERALIZED AIRWAYS
DISEASE ALONE

Thesis

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In Chest Diseases

By

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INTRODUCTION

INTRODUCTION

Little is known about the actual incidence of allergic morbidity and mortality due to hypersensitivity to helminth parasites (Andrews, 1962).

Continuing Stimulation of IgE by parasitic infection was probably the norm for the human race until the past few centuries when allergic diseases may be the price. Man has had to pay for increasing hygiene in an environment abounding in highly allergic material (Goodfrey, 1976).

Farzan (1970) and Carswell (1976) found that the percentage of asthmatic patients with concomitant parasites was not different from non asthmatic control and they stated that parasites are not an important cause of asthma but can coexist. Also Sami (1952); Salem (1959) and Van Dellen (1971) said that parasites and asthma are associated rather than causally related.

On the other hand Mainzer (1939) recorded six cases of bronchial asthma from Alexandria as being caused by generalized infection with *Schistosoma* and stated that asthma is due to an allergic reaction probably to the eggs of the parasite

Also, Tullis (1970) implied that asthma was related to the parasites and that treatment of the parasitic infestation relieved the asthma.

Schistosomiasis is a parasitic disease of global importance, more than 200 million people in Africa, Asia, South America and the Caribbean are believed to have schistosomiasis.

Pulmonary lesions can be found at autopsy in one third of all cases of schistosomiasis (Shaw and Ghareeb, 1938). Clinically significant pulmonary involvement is much less common but such incidence is prone to become higher in our country through the increase of bilharzial infestation due to perennial system of irrigation. On the other hand obligatory mass antibilharzial treatment and the generalization of surgical procedures creating artificial portosystemic shunts to relieve portal hypertension enhance the risks of pulmonary involvement by the mobilization of the worms and ova to pulmonary vascular bed.

AIM OF THE WORK

Aim of Work

The aim of the present work is to evaluate the prognostic value of immunostimulant drugs in immunosuppressed bilharzial patients with generalized obstructive air ways disease. (G.O.A.D).

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REVIEW OF LITERATURE

BRONCHIAL ASTHMA

Asthma is generally understood to refer to a disease characterized by episodes of wheezy breathlessness caused by narrowing of intrapulmonary airways (Weiss and Segal, 1976).

The bronchial obstruction at least in the early stages is paroxysmal and reversible (Crofton, and Douglas, 1981).

The reversibility of the obstruction of the air ways may be spontaneously or as a result of treatment (Turner-Warwick, 1978).

Ciba foundation Guest Symposium (1959) defined bronchial asthma as a disease characterized by widespread narrowing of the bronchial airways which changes in severity over short periods of time either spontaneously or under treatment and is not due to cardiovascular disease. The clinical characteristics are abnormal breathlessness which may be paroxysmal or persistent wheezing and in most cases relieved by bronchodilator drugs.

According to "Crofton 1981" the adverse reactions of broncho constriction, swelling of the mucous membrane, plugging with viscid secretion are due to, immunological mechanisms.

CLINICAL TYPES OF ASTHMA

Extrinsic asthma:

The purest and most uncomplicated form of asthma is extrinsic asthma, which is recognizable early in life and in which a familial trend is often a prominent feature ;Asthmatic children and adults under the age of 30 years usually are found to be atopic persons with a history of other allergic disorders such as hay fever and infantile eczema. These symptoms are usually worse in spring and Summer (Grove et al., 1975), Those persons usually have positive type I skin reactions. They are good candidates for stringent environmental conditions and occasionally for hyposensitization therapy. As the allergens that are primarily responsible for causing airways obstruction are often easily identifiable (Turner - Warwick, 1971, and Costello, 1980), IgE is specific antibody to this type of reaction (Rackemann, 1947).

Pepys (1969) has also described another group of asthmatics with the so-called extrinsic non atopic asthma, who have no family background of allergy, no specific allergen, no seasonal prevalence. The patients tend to develop their symptoms in relation to some particular agent during the course of their job, specific IgE and

IgG antibodies may be demonstrated, and patients tend to develop their symptoms later in life (Turnerwarwick, 1978). In non atopic group, the particular environmental exposure is of primary importance, whereas in the atopic group it is the constitution which is important (Pepys, 1969).

INTRINSIC ASTHMA

Non Allergic or Idiopathic Asthma

Most asthmatics over the age of 30 - 35 have intrinsic asthma. Etiologic elements are complicated and elusive. Hereditary predisposition and atopic background are absent. Bacterial and viral infections are common but bacterial allergens cannot explain the disease nor will antimicrobial therapy solve its problems. The beginning of a long period of suffering often starts suddenly and may be attributed rightly or wrongly to an acute respiratory infection, whatever the primary cause the factor of chronic bronchitis is a frequent complication. Almost any dust, vapour or fume and especially tobacco smoke may trigger attacks. Often with a tendency for symptoms to be worse in winter, relief between attacks is often incomplete, although mild wheezing may persist for years (Rackeman, 1947; Pepys, 1969; Turner-Warwick, 1978 and Castello, 1980).

Intrinsic asthma may be termed non allergic or idiopathic but the term adult onset should be discarded because in some cases the disease first appears during childhood, some allergic asthmatics become symptomatic for first time as adults because they have not previously