INTRODUCTION

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Exposure to vegetable dusts is widely encountered in many industries , agricultural work , and the general environment . Occupational exposure to cotton dust is widely encountered in many countries , and involves a large number of workers mostly in the textile industry and in factories preparing raw material for textile manufactutre (W.H.O. , 1983) .

Byssinosis occurs throughout the world where cotton , flax and soft hemp fibres are processed but cotton dust is most commonly responsible (Valic and Zuskin , 1971) .

A recent study ,by Bouhuys and his group (1981) , showed that persons responding with a fall in ventilation to aqueous cotton bract extract did not exhibit more sensitivity to inhaled histamine than those not responding to cotton bract extract . They conclude that "responders" to cotton dust extract do not suffer from clinical asthma .

A comparison of chronic respiratory symptoms and ventilatory function between English cotton workers (from towns with heavy atmospheric pollution at that time) and Dutch cotton workers (from a more rural environment) showed that although the prevalence of chronic bronchitis was higher in the former it was nevertheless present in some Dutch workers . It has been suggested that such an effect might be a form of industrial bronchitis (Morgan et al . , 1982) . Furthermore ,Rooke and Dempsey (1985) , suggested that emphysema seen in those with

byssinosis is due to concomitant cigarette smoking and is not a feature of the byssinosis .So,. if the respiratory disease of cotton and other textile fibres workers (byssinosis) is , in fact a mixture of three separate conditions - · acute symptoms , an acute fall in ventilatory function and a chronic respiratory disorder that may be called industrial bronchitis- Where are we to look for a cause ?

The overall picture of byssinosis in Egypt is still uncertain . Many Egyptian investigators reported a high prevalence of byssinosis among cotton workers (Aba Alkhail ,1985).

Byssinosis was not reported in various other surveys carried out in Egypt (Abou - Ali , 1975) , (El - Sobky , 1975) , and (El-Ghawabi , 1978) .

All cases referred to the ministry of manpower and social security organization in Egypt as suspect byssinosis were refused for compensation apart from one case in Tanta textile mill (El - Ghawabi , 1978) .

Zaghloul and Emara (1978) together with El - Ghawabi think that the overall picture of byssinosis in Egypt is still uncertain and obscure and needs further consideration . They believe that byssinosis can be considered as chronic asthmatic bronchitis perpetuated by cotton dust exposure .

Massoud and El - Sobky (1984) , in a study in a textile Co . in Menoufia Governorate in Egypt , reported no typical cases of

byssinosis , but they found that 9.7 % of workers exposed to cotton dust suffer from atypical chest tightness (not constantly related to the first day of the week or the after vacation) and the name atypical byssinosis was proposed for those group of workers .

A questionnaire on the characteristic symptoms of byssinosis and the measurement of ventilatory capacity and its change during the workshift have been useful in detecting workers who have been adversely affected by dust . Both methods depend on the cooperation of the workers . The medical follow up system must include objective criteria for establishing the diagnosis of byssinosis . The development of other physiological and laboratory tests is considered important for the early detection of reversible adverse effects of dust exposure (W.H.O.,1983).

The purpose of this study was intended to throw more light on the effect of exposure to cotton dust on the health of Egyptian workers especially those working in textile industry , and to investigate the role of cotton antigen in the etiology of cotton related symptoms or diseases .