INTRODUCTION

Asthma is a chronic inflammatory disorder of the airways characterized by airflow obstruction, airway hyperresponsiveness (AHR) and airway wall remodeling, The pathogenesis of remodeling involves goblet cell and submucosal gland hyperplasia, vascular proliferation, deposition of extracellular matrix in the subepithelium and submucosa, and hypertrophy/hyperplasia of airway smooth muscles, leading to thickening of the airway wall ***(Bousquet et al., 2000).***

The combination of epithelial damage, prolonged epithelial repair, overproduction of profibrotic growth factor and proliferation and differentiation of fibroblast are considered central to remodeling ***(Boxall et al., 2006).*** Airway remodeling can result in chronic airflow obstruction and more severe disease ***(Mcparland et al., 2003).***

Transforming growth factor beta l (TGF-βl) is an important fibrogenic and immunomodulatory factor considered to have pivotal, roles in pathogenesis of airway remodeling, Transforming growth factor beta 1 promotes proliferation of fibroblasts and deposition of collagen ***(Duvernelle et al., 2003).*** TGF-β1 immunoreactivity and mRNA expression in the airway submucosa are higher in patients with asthma than in healthy control subjects and are associated with severity of disease and subepithelial fibrosis. On the other hand, TGF-β1 might also function as a down-regu1ator of the immune response. Studies in rodent modes have demonstrated anti-inflammatory effects of TGF-β1 ***(Hansen et al., 2000).***

AIM OF WORK

1- Study the value of TGF-β1 as a prognostic indicator of severity of asthma.

2- The evaluation of its presence as a marker in differentiation between atopic and non atopic asthma.