INTRODUCTION :

Bronchial asthma is one of the most common pediatrics chronic diseases that is responsible for significant morbidity , school absenteeism and mortality . (Mori et al , 1995) . A recent comprehensive definition of asthma is that ; A chronic inflammatory disorder of the airways in which many cells play a role . In susceptible individuals , this inflammation causes symptoms which are usually associated with widespread , variable airway obstruction that is often reversible either spontaneously or with treatment , and causes an increase of airway responsiveness to a variety of stimuli . (NHLBI , 1995) . Interleukin - 10 is an intrinsic antiinflammatory peptide , originally identified and cloned as cytokine synthesis inhibitory factor , which has major downregulatory influences on inflammation . (Borish et al , 1996). Human IL - 10 is produced by both T_{H1} and T_{H2} lymphocytes however , blood monocytes and tissue macrophages may be its most important source . (Del Prete G , et al , 1993) . It has effects on inhibition of interferon (IFN) -γ and IL -2 Production by T_{H1} lymphocytes , IL-10 acts to inhibit cytokine production by mononuclear phagocytes , natural killer cells , T_{H2} lymphocytes . (Hsu D-H , et al , 1992) . Expression of IL-10 by antipresenting cells may have a role in lessining allergic inflammation through his ability to inhibit the synthesis of nonspecific proinflammatory cytokines such as IL-1 , IL-6 , tumor necrosis factor (TNF) - α and IFN-γ , as well as cytokines associated with allergic inflammation including IL-4 and IL-5. (Del Prete G , et al , 1993) . It was speculated by Borish et al , 1996 that diminished IL 10 Production may contribute to develpment of asthma .

Aim of the work :

The aim of this study is to determine the serum level of IL-10 in children with bronchial asthma during asthma attack and after treatment (after remission) as well as its level in normal non-asthmatic healthy children. It is in an attemp to find the contribution of IL-10 level in the development of asthma and the occurrence of acute exacerbations .