

INTRODUCTION

Asthma is the most frequent chronic disease in pediatric age (Nelson et al., 1989). It is a clinical condition in which symptoms include intermittent shortness of breath, wheezing, chest tightness and cough. In 1988 there was about 4000 deaths due to asthma and there is evidence for an increase death rate in 1990s (Koren & Bromberg, 1995).

In the U.S.A childhood asthma is one of the most common reason for admission to hospital and the incidence of asthma in children 3 to 17 year of age increased 50% (Skoner & Colliguri, 1988).

Severe exacerbations of childhood asthma are characterized by a combination of pathophysiological events, which carry theoretical risk for cardiac affection associated with E.C.G changes and changes of the serum levels of cardiac enzymes (Ck, CKMB & LDH) in asthmatic patients. (Magiure et al., 1991).

Changes in heart, liver & skeletal muscles due to hypoxemia and alteration in tension of CO₂. Therefore, there are changes in levels serum enzymes (CK, CKMB, LDH, SGOT & SGPT) (Usher et al., 1974). Also, it was suggested that allergic reaction in the lung tissues might make some contribution in this changes of serum enzymes. (Press and Lipkind, 1990).

Serum level of electrolytes (Na, K, Ca & P) may be affected as a result of tissue damage due to hypoxia and asthmatic medications (Kolski et al., 1988).