INTRODUCTION

Children with congenital heart disease have been reported to show significant growth retardation both prenataly and postnataly **(Vogt KN, et al., 2007)**.

Different types of cardiac malformations can affect nutrition and growth to varying degrees **(Da silva VM, et al., 2008).**

Whereas recent surgical advances have allowed for early correction or palliation in most cases, many forms of congenital heart diseases are complex and not readily amenable to repair in early infancy. In this circumstances , surgical repair is usually delayed until the infant reaches a specified weight , yet the adverse effects of chronic hypoxemia on growth make this a difficult goal to achieve. **(Vogt KN; et al., 2007) .**

Insulin like growth factor 1(IGF-1) is a well known biochemical marker in the growth of mammals it is secreted in response to growth hormone to stimulate tissue growth, it also functions as a survival factor, in the heart tissue , IGF-1 has shown to be involved in myocardial growth , remodeling and inhibition of apoptosis **(Yamamura T, et al., 2001)**

Because the impairment of heart growth is an important phenomenon found in congenital heart disease , IGF-1 has been thought to be involved in the process **(Stenbog EV, et al ., 2000)**

AIM OF THE WORK

The aim of the present prospective study was to study the serum level of insulin like growth factor -1 hormone in infants and children with cyanotic and acyanotic congenital heart disease and to look for a possible relationship between IGF-1 concentration and growth parameter and degree of cyanosis of these children.