INTRODUCTION

Insulin like growth factors (IGFS) are synthesized in many organs and tissues. But most of the circulating peptide is released from the liver ***(D'Erocle and Underwood, 2001).***

IGFS are important mitogens that are present in many body fluids, where they are commonly bound with high affinity to insulin like growth factors binding proteins (IGFBPS). IGFS play an essential role in the modulation of cellular growth and the differentiation of various organs including the kidney ***(Laron et al., 2003).***

At least six IGFBPs have been identified, cloned and sequenced and these are believed to modulates the effects of IGFS on target tissues ***(Phillips and Uterman, 2005).***

Normal growth depends on the complex interaction of genetic influences, adequate nutrition, intact endocrinal control and tissue responsiveness. Over the last few years, there have been considerable development in our understanding of hypothalamo-pituitary – growth hormone – insulin like growth factor axis, both in health and disease. IGFS are a family of polypeptide that mediate the anabolic action of growth hormone ***(Clemmons and Jones, 2006).***

The predominating current theory for poor growth in renal disease is that IGFBP-3 is inadequately cleared in chronic renal failure, this leads to high circulating level of IGFBP-3 which binds to IGF-1 resulting in less free IGF-1 and therefore poor growth ***(Keifer et al., 2007).***

AIM OF THE WORK

The aim of this work is to study the serum level of insulin like growth factor-1 hormone and insulin like growth factor binding protein 3, in children with congenital heart diseases which may alter the growth of these patients.