Assessment of skeletal and physical growth of children with congenitial

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Our study includes 62 cases divided into two groups. The first included 31 patients with congenital heart disease 22 were having congenital acyanotic heart disease and 9 were having cyanotic congenital heart disease. The second group consisted of 31 healthy parallel controles in the same age , sex and residance .The anthropometric measurements (weight, length , and head circumference) and bone age were taken for each one of both groups (patients and Control) while serum osteocalcin level was estimated in 14 cases only (7 cyanotic and 7 acyanotic) and compared with the controls .Statistical analysis of data revealed the followings :-weight was significantly lower in all cases, cyanotic andacyanotic groups in relation to their controls . Length was significantly lower in all cases, cyanotic andacyanotic groups in relation to their controls . Headcircumference was insignificantly lower than controls in allgroups .Bone age was significantly delayed than control in all cases and cyanotic groups only .Serum osteocalcin was insignificantly different from the controls in all cases , cyanotic and acyanotic groups but all are within normal range.clr—91—SummaryThere are positive and significant relation between RUS bone age and weight & length in all groups.Growth failure in congenital heart disease is multifactorial. Haemodynamic abnormalities, tissue anoxia, intrauterine growth retardation hypocellularity , insufficient nutrient intake , malabsorption, hypermetabolism, respiratory problems may have a role in growth retardation in congenital heart disease.Conclusion and recommendations :-from the above results it can be concluded that the RUS bone age was a sensitive index of growth assessment in our groups and serum osteocalcin level has no role in this study.We recommend that assessment of skeletal growth can be done by RUS method beside physical growth by growth chart.We recommend also provision of sufficient caloric intake, proper treatment of heart failure and respiratory infections , iron suplementation when required and encouragement of breast feading to all infants in general and to infants with congenital heart disease in particular is recommended . Corrective surgery when indicated should be performed as early as possible.Gir.