The Relation between Obesity and Congenital Heart Disease in School Age Children

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Abstract:

Background: Congenital heart disease (CHD) is the most common birth defect; occurring in approximately 8 out of every 1,000 births. The American Heart Association (AHA) estimates that 1 in 150 adults are living with CHD. Obesity may pose additional cardiovascular risk to children with acquired and congenital heart disease. Aims: to explore the relation between obesity and congenital heart diseases in school age children. Design: - Comparative descriptive research design was used to fit the nature of this study. Setting: Outpatient University Hospital of Assuit and Sohage of school age children. Subjects: This study included 200 school age children from March to December 2014. They were selected randomly and divided into two equal groups; Group I (Assuit) and Group II (Sohag group) included 100 school age children for each group. Results: The results showed that both sex were approximately 65 male and 35 female presented among Assuit and 42 male and 58 female from Sohag groups. Also, it was noted that urban residence in Assuit more than in Sohag group. Statistical significant differences were found between the two groups as regard body mass index and the majority of children were represented obesity in both Assuit and Sohag group (45.0%, 58.0%) respectively. As these children already present the risks associated to heart disease, it was noted that urban residence in Assuit more than in Sohag group. Finally there was strongly relation between obesity and congenital heart defect in both studied group. Conclusions: it was concluded that the relation between growth measurements weight and height, highly statistical in the studied group in Assuit and Sohag university hospitals and between the two groups as regard body mass index and the majority of children were represented obesity in both Assuit and Sohag group (45.0%, 58.0%) respectively. Obesity was strongly associated with congenital heart defects in the both studied group. Recommendation: Nutritional and obesity educational programs must be monitored and evaluated regularly to determine progress towards nutritional goals. It is particularly important to promote a healthy lifestyle in this group. Finally educational programs should be provided to increase knowledge and skills of health care professionals in applying obesity and congenital heart diseases as a management of obesity to decrease the complication.

Keywords:

Congenital Heart Disease, Obesity, School age children.

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