

Waist Hip Ratio as the Predictor of Hypertension in Obese Males

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Abstract

Background: Obesity is a common problem in much of the world today and that is linked directly with several disease processes, notably, hypertension. It has been estimated to affect 5 to 10% of children and adolescent and 20 to 40% of adults in the developing countries like India. In India the number of overweight people has increased significantly over the last 20 years. Aims: The present study was conducted to identify which of the Anthropometric parameter better predictor of future hypertension development in this group of population. Materials and Methods: Human subjects male of age group 20-40 years (n=50) were included in this study and Anthropometric indices of the individuals were recorded as per protocol. Blood Pressure readings were taken as per the standard protocol with a Mercury Sphygmomanometer. Results: The statistical analysis was done using Pearson correlation coefficient between SBP and other variables; the results show that Waist Hip Ratio (WHpR) was having strong positive correlation with SBP, followed by Waist Girth. Similarly the DBP was also correlated with other variables moderate positive correlation was shown with WHpR. The results clearly show that WHpR is a better anthropometric index in predicting the levels of SBP and DBP in this group of population. Conclusion: In conclusion we found Waist-Hip Ratio (WHpR) is important in prediction of elevated levels of SBP and DBP. Waist Girth of $> 90\text{cm}$ and Waist-Hip Ratio (WHpR) of > 0.93 should be considered as at an increased risk for developing future Hypertension in this group of males.

Keywords : Systolic Blood Pressure, Diastolic Blood Pressure, Waist-Hip Ratio.

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