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TO STUDY THE RELATIONSHIP OF NECK CIRCUMFERENCE AS A PARAMETER IN PREDICTING METABOLIC SYNDROME- A ONE YEAR CROSS SECTIONAL STUDY

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Abstract

Background and objectives: *Upper-body fat distribution has long been recognized as related to increased cardiovascular disease risk, and neck skin fold or NC has been used as an index for such an adverse risk profile. This study was aimed to evaluate the relationship of NC as a parameter in predicting metabolic syndrome.* ***Methodology:*** *The present study was conducted in the Department of Medicine, KLES Dr. Prabhakar Kore Hospital and Medical Research Centre, Belgaum during the study period from January 2011 to December 2011. Hundred (100) cases of metabolic syndrome were taken based on NCEP ATP III criteria and the various components of metabolic syndrome and the NC were evaluated and compared.* ***Result:*** *In this study 66% of the patients were males and 34% were females. Mean age of the study population was 54.46 ± 14.93 years. 46% of the patients had metabolic syndrome with four components and 31% had five components. The commonest component of metabolic syndrome was hypertension (95%) followed by hyper triglyceridemia (82%). Abnormal NC was observed in 97% patients and mean neck circumference was 38.93±1.95 centimeters. Waist circumference was abnormal in 74% patients. The mean waist circumference of the study population was 97.9±7.44 centimeters. Lipid abnormalities of total cholesterol, LDL, triglycerides and HDL were noted in 30%, 18%, 82% and 76% of the patients respectively.* ***Conclusion:*** *Patients with metabolic syndrome presented with abnormal NC, which was not associated with any of the components of metabolic syndrome. However, elevated BMI had associated increased neck circumference and this association was statistically significant.*

Keywords: *Body mass index, metabolic syndrome, neck circumference (NC), upper body fat, waist circumference.*