ABSTRACT

TITLE: ANTHROPOMETRIC MEASUREMENTS AND CENTRAL OBESITY – A MAJOR PREDICTOR OF CARDIOVASCULAR DISEASE RISK IN WOMEN- A CROSS SECTIONAL STUDY

AUTHORS: Sherry Jenilin G, Thenmozhi R

Department of Physiology, Tirunelveli

BACKGROUND: Obesity has now become a major public health problem which has many serious clinical consequences. According to WHO, obesity is defined as an increase in body fat content of >25% in adult male and over 35% in adult female. Abdominal obesity assessed by Waist Circumference (WC) has a greater ability to predict cardiometabolic risk than BMI which assess general fat deposition. Not too many studies available regarding obesity from southern Tamilnadu especially around Tirunelveli district, this study was chosen. AIM: To determine central obesity is the major predictor of cardiovascular disease risk in women.

MATERIALS AND METHODS: This was a cross-sectional study carried among 100 female patients between age group of 20 and 45yrs who were attending non communicable disease department of Tirunelveli Medical College. Institutional ethical committee clearance was obtained. After getting informed written consent anthropometric measurements like height, weight, waist circumference were taken using standard methods. BMI was calculated. Blood pressure was measured. Blood samples were analysed for fasting blood sugar and lipid profile. Obese women were segregated from the study population based on anthropometric measurements. They were considered as cases. Their blood values were compared with those women with normal anthropometric measures.

RESULT: Using unpaired ‘t’ test data were analysed. In our study, WC had a highly significant association with FBS, blood pressure and lipid profiles like total cholesterol, HDL, LDL, TGL. It also showed a more positive correlation than BMI. Both BMI and WC showed negative correlation with HDL.

CONCLUSION: From our study, it was concluded that central obesity determined by WC had a stronger association with cardiovascular risk than BMI. So WC measurement can be considered in routine clinical practice.

Key words: Anthropometric measurements, central obesity, waist circumference, cardiovascular risk