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## Comparison of lipid profile and anthropometric parameters in hypertensive and non-hypertensive females: A case control study

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**Objectives:** To compare the correlation of hypertension with lipid profile and anthropometric parameters among hypertensive and non-hypertensive females
**Methods:** Age sex matched case control study was conducted among 50 (hypertensive 25 and non-hypertensive 25) females from a suburban area aged 35-55 years. Blood pressure, waist circumference (WC), height and weight were measured. Body Mass Index (BMI) was calculated. After a twelve hour fast blood sample was collected for total cholesterol (TC), high density lipoprotein cholesterol (HDL), and triglycerides (TG) assays. Total cholesterol / HDL ratio and low density lipoprotein cholesterol (LDL) (Friedwald formula) were calculated. Data was analyzed using SPSS version 16.
**Results:** Mean ages of hypertensive and non-hypertensive females were 51 ± 4 and 45 ± 7 years respectively. About 96% of the hypertensive subjects were above 45 years whereas only 46% of the subjects were above 45 years in the controls. All the lipid profile parameters were within the normal reference range except LDL which was elevated in both the hypertensive and non-hypertensive subjects. Triglycerides showed a positive correlation with hypertension. Mean WC and BMI were higher in both hypertensive (90.61±7.05cm, 26.04±3.45kg/m$^2$) and non-hypertensive (87.51±9.81cm, 26.21±4.52kg/m$^2$) subjects respectively.
**Conclusions:** There were no significant difference in both the lipid profile and anthropometric parameters in hypertensive and non- hypertensive subjects. But elevated levels of WC, BMI and LDL in both hypertensive and non- hypertensive subjects suggest that the study subjects are at risk of developing metabolic syndrome.

## PP 8

## Peak expiratory flow rate of Sri Lankan Tamil adults aged between 20 to 60 years in Jaffna district: A preliminary finding

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**Objectives**: As variations in PEFR amongst ethnic groups have been observed in many studies and a lack of normal values amongst the Tamil adult population hampers clinical use of the PEFR as an indicator of respiratory dysfunction, objective of this study was to measure the normal peak expiratory flow rate (PEFR) of Sri Lankan Tamil adults.
**Methods**: Healthy adults (n=267) aged between 20-60 years from regions of Jaffna district were studied. Standing height, sitting height and weight were measured. Age, BMI, sitting height to standing height ratio were calculated. PEFR was measured with (mini - Wright compatible) Asthma Plan peak flowmeter. Independent t test and Pearson correlation were used in SPSS for analysis. A p value of $\leq 0.05$ was set as significant.
**Results:** There were125 males and 142 females. The mean age was 41± 10 years, and 37± 10 years in males and females respectively. The mean PEFR were 458 ±70 l/min in males and 316 ± 46 l/min in females. The mean PEFR differed significantly between both sexes. Reduction in PEFR after fifth decade (37 males, 26 females) was significant in males. There was a significant negative correlation (r = - 0.281) between PEFR and age amongst the males. Significant correlations of PEFR were observed with standing height (0.428), weight (0.327) and sitting height (0.374) in males. In females standing height (0.211) and sitting height (0.264) had significant correlation with PEFR.
**Conclusions:** Normal values of PEFR in Sri Lankan Tamil adults were studied. A reduction in the PEFR was observed after the fifth decadeof life in this population.