and body mass index (BMI) were computed. Analysis the correlation between body fat distribution measures and incidence, type and severity of coronary heart disease. CHD risk factors were collected by logistic multivariate regression analysis.

Results

1. Male and female have different features in distribution of body fat, and CHD has different characteristic in them ($p<0.05$);
2. Compared with non-CHD group and angina groups, weight and waist circumference were higher in AMI group ($p<0.05$). Compared with non-CHD group, neck circumference were higher in angina and AMI groups ($p=0.009$ & 0.000);
3. In the four groups divided by vessel disease, there were significant difference in neck circumference ($p=0.014$), compared with double and triple vessel disease groups neck circumference were lower in single-vessel disease group ($p=0.011$ & 0.002);
4. Multiple correlative analysis showed BMI, NC and WC were positively correlated with TG and vLDLc, WC was also correlated with chd and HDLc ($p<0.05$), NC was positively correlated with type coronary heart disease and the number of diseased vessels ($p=0.000$ & 0.002).
5. Logistic multivariate analysis indicated that BMI ($\beta=0.162$, $p=0.003$); NC ($\beta=0.222$, $p=0.000$), diabetes ($\beta=1.154$, $p=0.047$) were closely related to the hazard of CHD.

Conclusions

1. The associations with lipid were stronger for BMI and waist circumference than it for neck circumference;
2. Compared with WC and BMI, neck circumference offered greater sensitivity for the diagnosis in coronary artery disease, and associated with the number of diseased vessels;
3. BMI and NC were important risk factors of coronary artery disease;
4. Distribution and Content of fat should be comprehensively evaluated by various body fat distribution measures, so that risk evaluation of CHD can be provided.

GW23-e0262

THE STUDY OF THE CORRELATIONSHIP BETWEEN DISTRIBUTION OF BODY FAT AND CORONARY HEART DISEASE

doi:10.1136/heartjnl-2012-302920j.8

Li Jian, Cong Hongliang. *Tianjin Chest Hospital*

Objectives To investigate the association between distribution of body fat and coronary heart disease (CHD) by analysing the correlation between body fat distribution measures and incidence, type and severity of coronary heart disease.

Methods One hundred and ninety-seven patients (male 118 and female 79) with suspected coronary heart disease were studied by the case-control method, who were divided into acute infarction (AMI) group ($n=52$), angina group ($n=100$) and non-CHD group ($n=45$); and according to the results of coronary arteriography they were divided into: normal group ($n=45$), Single-vessel disease group ($n=48$) double -vessel disease group ($n=51$) and triple-vessel disease group ($n=53$). Blood lipids were detected by the standard method. Body surveying index consisting of the patients' height, weight, neck circumference and waist circumference was measured