INTRODUCTION - "Apple" body shape (Waist-to-Hip Ratio, WHR>1) is a documented risk factor for cardiovascular diseases, the first cause of morbidity and mortality in Western societies. Mental disorders, especially anxiety and depression, are also related to cardiovascular diseases with accumulating evidence that these conditions have in common a dysregulation of inflammatory pathways. Nevertheless, joint assessment of WHR and symptoms of anxiety and depression has not been reported commonly so far.

AIM - To explore the association between WHR and symptoms of anxiety and depression in a female primary care sample.

METHODS - Cross-sectional design. Evaluation of all consecutive women undergoing a GP consultation in a Northern Italy Practice. Exclusion criteria: age <40 or >80; use of antidepressants or antipsychotics; previous stroke or heart attack; obesity due to hereditary. Psychometric assessment was done by HADS (Hospital Anxiety and Depression Scale). Statistical analysis was performed using STATA.

RESULTS - 125 women were assessed. WHR was inversely associated to HADS-Anxiety subscale score ($\beta=-5.28$, $p=.02$) and HADS-Depression subscale score ($\beta=-4.02$, $p=.04$) in the 40-60 years' subgroup. In particular, WC was positively related to HADS-A ($\beta=13.39$, $p=.02$) and HADS-D ($\beta=10.38$, $p=.03$) while HC was inversely associated to HADS-A ($\beta=-11.3$, $p=.01$) and HADS-D ($\beta=-8.6$, $p=.03$). No associations were found in older groups.

CONCLUSION - 'Pear" body shape (WHR<1), with a peripheral distribution of fat, is inversely associated to symptoms of anxiety and depression in women aged 40 to 60. The post-menopausal transition to the 'apple" model, with a central fat distribution, could explain the lack of correlations in women >60 years.