Overweight, obesity and cardiometabolic risk

Objective:
To compare cardiometabolic risk factors in normoponderal versus overweight and obese patients.

Methods and design:
There were included two non-smokers groups of patients: normoponderal and abnormal body mass index (BMI) groups with the same number of patients (90) and similar distribution by sex. Group of abnormal BMI patients was divided in young adult group (18-35 years old) and mature adult group (36-65 years old). Overweight, obesity, cardiometabolic risk were defined in accordance with the guidelines.

Results:
For abnormal BMI group versus normoponderal group our analyze showed (in percents):
- total cholesterol (64.44 vs 46.66)
- HDL cholesterol (32.22 vs 25.55)
- LDL cholesterol (65.55 vs 42.22)
- triglyceride (42.22 vs 28.88)
- sugar blood (10 vs 3.33)
- uric acid (10 vs 3.33)
- blood pressure (27.33 vs 3.33).
Young adult had higher percents for abnormal HDL cholesterol (42.22), triglycerides (46.66) and uric acids (13.33) vs mature adult group (22.22; 37.7; 6.66).

Conclusions:
Overweight and obesity were associated with cardiometabolic risk factors.
Young adults had an increased metabolic risk by abnormal HDL cholesterol, triglycerides and uric acids.
We should screen all young adults with abnormal BMI with complete lipid profile and uric acids for better long-term follow up.
Evaluation of endothelial dysfunction using arteriograph could be useful for better appreciation of cardiovascular risk and indication of pharmacological treatment.