# **The lipid profile in patients with subclinical Hypothyroidism and Metabolic Syndrome** Vesna Popović-Radinović, Zorica Rašić-Milutinović, Jelena Tica-Jevtić, Marina Vujović, Zoran Gluvić and Milena Lačković KBC Zemun, Endocrinology

### INTRODUCTION

The lipid profile is disturbed in both subclinical hypothyroidism (SH) and metabolic syndrome (MetS).

#### AIM

The aim of this study was to try to find changes of lipid profile in patients who developed subclinical hypothyroidism and metabolic syndrome

## MATHERIAL AND METHODS

We chose 70 patients (all females) with newly discovered SH and 20 healthy controls, mean age 51.1 (±6.79). The parameters that we determined are: TSH, FT4, AntiTPO-At, triglycerides, whole, LDL and HDL cholesterol. For statistical calculations we used EXCEL, Med-Calc and SPSS Programs.

## RESULTS

The patients were additionally divided in 2 subgroups, considering existence of D.mell.type2 (DM), 1 with and the other without DM.The patients had higher levels of whole and LDL cholesterol than the control group (p=0.02). The levels of triglycerides had no difference between groups. The percentage of women with level of HDL cholesterol lower than 1.29 mmol/L is almost the same in the 3 groups (p=0.953). The percentage of women with level of triglycerides higher than 1.69 mmol/L is statistically significant between 3 groups (p=0.01). We didn't find correlation between TSH, FT4 and antiTPO-At and levels of triglycerides and cholesterol.

Concentration of Tg  $\geq$  1,69 mmol/L







Percentage of patients with concentration of HDL-h < 1.29 mmol/L is almost the same in the three groups (P=0.953)

Components of MetS	Controls	SH without DMT2	SH with DMT2
Waist ≥ 80 cm	50 %	93,4 %	93,4%

HDLcholesterol≤1,26mmol/I	40%	43,3%,	44,3%
Triglicerids ≥1,69 mmol/l	20%	34%	66,7%
Glicaemia ≥5,6 mmol/l	20%	34,4%	94,4%
TA ≥ 130/85 mmHg	20%	52%	78.9%

#### CONCLUSION

Considering the results of this study we may conclude that the patients with SH and MetS may have a higher risk for developing coronary disease and/or hypertension