ISGE
GYNECOLOGICAL ENDOCRINOLOGY
THE 18TH WORLD CONGRESS
7-10 MARCH 2018 FLORENCE, ITALY

P288. Women with the metabolic syndrome have evidence of subclinical arterial disease early after menopause

E Armeni (GR) [1], K Stamatelopoulos (GR) [2], A Kazani (GR) [3], D Rizos (GR) [4], A Augoulea (GR) [5], G Kaparos (GR) [6], A Alexandrou (GR) [7], G Georgiopoulos (GR) [8], I Lambrinoudaki (GR) [9]

Context: Women after the menopause experience an adverse cardiometabolic profile.
Objective: To examine the potential association between subclinical atherosclerosis with the metabolic syndrome (MS) and its feature in a sample of non-diabetic postmenopausal women.
Methods: MS was defined according to the Joint definition. Structural evaluation of carotid arteries included carotid artery intima-media thickness (IMT). Functional assessment involved estimating endothelial function using the flow-mediated dilation (FMD), as well as estimation of arterial stiffness using measures of carotid-femoral pulse wave velocity (PWV).
Patients: 473 informed consenting postmenopausal women, who were retrieved from the Menopause Clinic, Aretaieio Hospital, University of Athens.
Interventions: High-resolution ultrasound was used to assess structural and functional indices of subclinical atherosclerosis. Fasting venous blood samples were obtained for biochemical and hormonal assessment.
Main outcome measures: The link between MS or MS-features and functional or structural indices of subclinical atherosclerosis.
Results: MS was prevalent in up to 17.3% of our young, non-diabetic postmenopausal women (age 56.4±6.74years, menopausal age 7.91±6.31years). The presence of MS associated with higher carotid IMT values compared to women with no MS (0.78±0.12mm vs 0.74±0.11mm, p-value=0.003). Moreover, PWV values exhibited a stepwise increase with accumulating features of MS. The presence of MS was associated with PWV values (b-coefficient=0.114, p-value=0.012) as well as with common carotid artery IMT values (b-coefficient=0.149, p-value=0.001), independently of traditional cardiovascular risk factors like age, smoking and LDL-cholesterol.
Conclusions: Accumulation of MS features is linked with subclinical atherosclerosis and arterial stiffness, even early on after the menopausal transition. Interestingly, this link is independent from traditional cardiovascular risk factors. These results imply that early identification of the individual constituents of MS and active intervention might be warranted in the population of postmenopausal women.

[1] 2nd Department of Obstetrics and Gynecology, Athens, [2] Department of Therapeutics, National and Kapodistrian University of Athens, Alexandra Hospital, Athens, [3] 2nd Department of Obstetrics and Gynecology, Athens, [4] Hormonal and Biochemical Laboratory, National and Kapodistrian University of Athens, Aretaieio Hospital, Athens, [5] 2nd Department of Obstetrics and Gynecology, Athens, [6] Hormonal and Biochemical Laboratory, National and Kapodistrian University of Athens, Aretaieio Hospital, Athens, [7] 2nd Department of Obstetrics and Gynecology, Athens, [8] Department of Therapeutics, National and Kapodistrian University of Athens, Alexandra Hospital, Athens, [9] 2nd Department of Obstetrics and Gynecology, Athens