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September 4-7, 2019

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BOOK OF ABSTRACTS

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PREVALENCE OF SARCOPENIA AND FACTORS ASSOCIATED WITH IT IN ELDERLY PATIENTS WITH CHRONIC KIDNEY DISEASE

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Objective: We investigated the prevalence of sarcopenia in elderly patients with chronic kidney disease and its relationship with various markers of nutrition, cognitive function, depression and activities of daily living.

Methods: A cross-sectional study was conducted with 80 patients having chronic kidney disease aged over 65 years. Sarcopenia was defined as a decline in muscle mass, strength and physical activity.

Results: The mean age was 76.74 ± 5.9 years; 22.4% were men and 65% had diabetes. Sarcopenia was highly prevalent in elderly patients (66.2% - 57.1% in men and 71.1% in women). Malnutrition was significantly associated with sarcopenia ($p=0.005$). Most of the diabetic patients (68.9%) had sarcopenia. Additionally, patients with depressive symptoms showed a higher risk of sarcopenia. The mean score in the Geriatric Depression Scale was significantly higher in cases with sarcopenia (7.75) compared to the cases with presarcopenia (5.26, $p = 0.03$). The activities of daily living were also influenced by the presence of sarcopenia ($p=0.036$).

Conclusions: Sarcopenia is highly prevalent in elderly patients with chronic kidney disease and is closely associated with malnutrition, depression and physical dysfunction.

Keywords: elderly, sarcopenia, malnutrition, depression, chronic kidney disease.

THE EFFECT OF ASSERTIVENESS TRAINING ON THE SELF-ESTEEM, VIOLENCE AND STRESS RESPONSE IN ADOLESCENTS

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Objective: This study investigates the effect of assertiveness training on assertiveness, self-esteem, violence, and stress response among adolescents.

Methods: In this study, 40 students aged 15 to 17 years were selected. In the frame of the European project, *Lights camera and action: against dating violence*, students were trained in 10 sessions (50 minutes each) through practical activities and in 5 other sessions to produce video-capsules. Psychological tests were administered before and after training: Maudsley violence scale, assertiveness schedule (interpersonal reactivity index), Rosenberg self-esteem, and perceived stress scale.

Results: The results of the study showed a significant improvement in the students' level of assertiveness and self-esteem after the intervention. The findings also confirmed that assertiveness training was effective in violence prevention and stress reduction in adolescents, especially in female students.

Conclusions: Assertiveness training in schools is effective to improve the self-esteem among adolescents and as a consequence to diminish violence and stress level in adolescence. This project has received funding from the European Commission Directorate, General Justice and Consumers Rights, Equality and Citizen Violence Against Women Programme 2016, under grant agreement No. 776905.

Keywords: assertiveness training, self-esteem, violence, experimental stress

PARTICULARITIES OF STRESS RESPONSE IN ADOLESCENTS: EXPERIMENTAL RESEARCH

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Objective: Acute stress has been defined as stress lasting from a few minutes to several hours,¹ and chronic stress as a stress that persists for several hours a day for weeks or months. Activation of the stress system leads to a series of psychic and physical changes defined as the stress syndrome. These changes are normally limited in time because they are designed to maximize an individual's chances of survival by mobilizing his or her physical and mental reserves. We assessed the salivary cortisol changes during an experimentally-induced acute stress.

Methods: The experimental study group included 17 adolescents aged 15-17 years. We have induced an acute stress in all participants using three different digital tasks. We measured salivary cortisol before the induction (T0), during the stress test (T1, T2, T3) and 25 minutes after the stress test (T5). We applied psychological tests for assessing the perceived stress level before and after the stress test.

Results: Statistical analysis revealed significant differences between the participants in terms of gender. Mean salivary cortisol at each point during the stress test significantly varied ($p < 0.01$, ranging between minimum 3.68 pmol/l and maximum 53.38 pmol/l). The girls have higher salivary cortisol levels at T0, T1, T3, T4, and T5 as compared the boys. Also, the repeated measurement analysis, which was performed to evidence the individual reaction to the induced stress, we found that girls had a higher level of stress than boys in all samples.

Conclusions: Our results revealed different cortisol response during experimental depending on gender and type of stress stimulation.

Keywords: experimental stress, salivary cortisol, Trier test

THE IMMUNOHISTOCHEMISTRY AND MORPHOMETRY STUDY OF THE EPICARDIAL ADIPOSE TISSUE CHANGES IN CORONARY ARTERY DISEASE PATIENTS ON RIGHT ATRIAL APPENDAGES BIOPSIES

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Objective: Epicardial fat is a measurable and modifiable risk factor that can serve as a novel and additional tool for cardiovascular risk stratification. Alterations in epicardial adipose tissue (EAT) biology, including increased fat thickness, inflammation and angiogenesis, have been described in (CAD) patients. Here, we proposed to measure EAT thickness and characterize inflammatory infiltrate and angiogenesis in epicardial adipose tissue in coronary artery disease (CAD) patients with and without chronic heart failure (CHF). We attempted also to identify clinical factors that may predict the development of CAD/cardiac ischemia.

Methods: The paper studies the association between the cardiovascular risk factors (CVRFs) and morphological EAT hallmarks (EAT thickness, inflammation and angiogenesis) in patients with CAD. EAT thickness was done by using morphometry based on usual histological stains. Inflammatory cell infiltration and angiogenesis was investigated by immunohistochemical staining, using antibodies against CD68 and CD34 markers, and morphometry was done in 5 random 200+ power fields of EAT on right atrial appendages (RAA) samples subsequently obtained during cardiac surgery.

Results: All CAD patients showed CVRFs such as age >50 years, arterial hypertension, smoking, DM, obesity and hyperlipidemia. EAT thickness, macrophage infiltration and angiogenesis of the EAT in the CAD patients (patients) with CHF was greater than that in CAD patients without CHF.

Conclusion: EAT thickness, inflammation and angiogenesis is related by age, HTA, HL, obesity and diabetes in patients with CAD and CHF, suggesting that these CV RFs factors may have a role in promoting cardiac ischemia.

Keywords: epicardial adipose tissue, epicardial inflammation, angiogenesis, coronary artery disease, chronic heart failure.

NUTRITIONAL STATUS IN ELDERLY PATIENTS WITH END-STAGE RENAL DISEASE

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Objective: The value of Mini Nutritional Assessment as nutritional assessor of protein-energy wasting in elderly is well known. However, its value on patients diagnosed with end-stage chronic kidney disease have, with some exceptions, been less investigated.

Methods: In 77 elderly hemodialyzed patients, Mini Nutritional Assessment, body mass index, lean tissue index and fat tissue index, handgrip strength and serum albumin were examined at baseline and after a six-month follow-up period.