Surgery Plenary Session
Saturday, September 16th, 14h00

PS125

Do patients after bariatric surgery change their physical activity habits? A prospective one-year follow-up study

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Aim: The purpose of this study was to assess whether patients have changed their physical activity habits one year after the bariatric surgery.

Introduction: Vast majority of obese patients have developed their condition by overeating and insufficient physical activity. Severe obesity leads to problems with locomotor system and constraint movability, resulting in closure of the vicious circle of gaining weight. Bariatric surgery is an effective weight loss method, but it is still unclear whether this procedure influences modification of physical activity routine.

Methods: 54 patients (55.56% females, $n = 30$) who underwent bariatric surgery at 2nd Department of General Surgery JU MC in Cracow, Poland from November 2015 to June 2016 were enrolled to this prospective study. Mean age, BMI and absolute waist circumference of participants were respectively: 43.6 ± 12.2 y.o., 45.94 ± 6.35 kg/m^2 and 128.39 ± 13.45 cm (female), 146.9 ± 17.21 cm (male). One day before the procedure and one year later participants were asked to complete two standardized questionnaires: Paffenbarger Physical Activity Questionnaire and WHO Global Physical Activity Questionnaire, on the basis of which average physical activity in metabolic energy equivalents (MET-minutes) per week has been estimated

Results: One year after surgery MET-minutes has increased over 14 times (Me:299.75, Q1–Q3:225.78–358.38 vs. Me:4339.85, Q1–Q3:1590.6–7827.1, $p < 0.00001$). Average time sitting or reclining has reduced from 480 to 300 min per day ($p = 0.00118$). Mean pace of walking has changed from <3.2 km/h to average 3.2–4.8 km/h ($p = 0.00406$). Participants were also asked to rate on visual analogue scale their level of exertion during normal activities. This parameter has decreased from mean 5 (equivalent of strong effort) to mean 2.5 (equivalent of weak effort) ($p = 0.00004$).

Conclusion: Before the procedure none of participants has achieved recommended by WHO weekly level of 600 MET-minutes and after surgery 81% of them have exceed it. This data have shown significant positive changes in physical activity in patients who underwent bariatric surgery.

Internal Medicine Poster Session
Friday, September 15th, 10h00

PS085

Comparison of liver biopsy and non-invasive APRI test in assessing the stage of liver fibrosis in patients with chronic HCV infection

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Aim: The aim of this study was to evaluate the performance of non-invasive APRI score in predicting significant fibrosis and cirrhosis in patients with chronic HCV infection who underwent liver biopsy.

Introduction: Determining the stage of liver fibrosis is essential in managing patients with chronic hepatitis C virus. In chronic HCV infection, liver biopsy is the gold standard method for assessing stage of liver fibrosis, but it is invasive with potential complications. Non-invasive markers have been proposed and APRI score (aspartate aminotransferase (AST)-to-platelet ratio index) has been shown as a simple and inexpensive marker of liver fibrosis.

Methods: This retrospective study included 142 patients with chronic hepatitis C who had undergone liver biopsy from January 2013 to December 2015. Liver fibrosis was staged according to METAVIR (F0-F4) scoring system. The diagnostic performances of APRI score in predicting significant fibrosis (F2-F4) and cirrhosis (F4) were evaluated and compared by ROC curves.

Results: Fifty-three (37.3%) patients had significant fibrosis and 18 (12.7%) had cirrhosis. The areas under the ROC curve of APRI for predicting significant fibrosis and cirrhosis were 0.76 and 0.81. Using recommended cut-off values for APRI test, significant fibrosis could be identified in 26% and cirrhosis in 22% patients, but specificity for significant fibrosis was 88% and for cirrhosis 91%. Results have also shown that lower platelets count in our patients is associated with higher stage of fibrosis ($p < 0.0001$).

Conclusion: APRI test shows low sensitivity and high specificity in the distinction between mild and significant fibrosis, and it shows good sensitivity in the evaluation of patients without cirrhosis and excellent specificity in patients with cirrhosis. Non-invasive biochemical tests and scores should be used only as additional criteria in differentiating the stage of liver fibrosis in chronic HCV infection, along with other non-invasive methods.

PS144

Characteristics of patients with diagnosed chronic fungal rhinosinusitis surgically treated at the Clinic for otorhinolaryngology, Clinical centre of Vojvodina, in the past five years

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Aim: To determine the characteristics of patients with chronic fungal rhinosinusitis surgically treated at the Clinic for Otorhinolaryngology, Clinical Centar of Vojvodina, from 2011 to 2016.

Introduction: The incidence of fungal rhinosinusitis in European counties is steadily growing. The reason behind this is the increased usage of immunosuppressive therapy, antibiotics and changes in everyday behaviors (increased stays in rooms with air-condition).

Methods: The study included 21 patients diagnosed with fungal rhinosinusitis. The patient's data was collected from their medical history.

Results: The mean age of the patients was 45 ± 16.51, with females being more often affected (11/21). The most commonly affected sinus was the maxillary sinus (54.67%), after that the sphenoid (20.83%), posterior ethmoid (18.5%), anterior ethmoid (8.33), and frontal (4.17%). Aspergillus was the most common cause (57.14%), mucormycosis was found once (4.78%). Staphylococcus aureus was isolated in 7 (33.33%) patients. Clinical symptoms were dominated by intensive facial pain and nasal secretion (found in all patients). Nasal congestion was present in 85.71% patients, less common was loss of sense of smell, in 47.62%. Endoscopic results showed significant differences between the characteristics of mucosa and mucus of the healthy and affected side of the patient's face. Significant differences are present in CT scans in all sinuses when the sinuses of the healthy and affected side of the patient's face were compared.

Conclusion: Clinical symptoms of patients with fungal rhinosinusitis were dominated by facial pain, nasal secretion and nasal congestion. Endoscopy shows pathological changes in the mucosa of the affected side of the patient's face, with viscous mucous secretions. Intraoperative findings show unilateral affection of the sinuses in all patients, most commonly in the maxillary sinus. The sphenoid snius was less commonly affected, the ethmoid and frontal were rarely affected. Aspergillus is proven to be the most common cause.

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PS175

Predictors for recurrent spontaneous intracerebral hemorrhage: A retrospective study

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Aim: The aim of this work was to determine predictors for recurrence of intracerebral hemorrhage (ICH), which may allow the identification and more appropriate management of patients at higher risk of recurrent ICH.

Introduction: The prognosis of recurrent bleeding seems to be worse than that of the first ICH. However, only a limited number of studies report the frequency of recurrence in ICH and attempt to characterize which factors may be associated with tendency for repeated hemorrhagic events.

Methods: We analyzed data from 549 patients admitted for treatment of ICH at the Unit of Faro of the Algarve Hospital Center, followed over a period of 5 years. 189 patients with a Rankin at discharge equal to 6 were excluded from the analysis.

Results: We identified 24 patients (6.7%) with recurrent ICH. Recurrence was significantly more frequent in woman (10.9%) then in men (4.4%) ($p < 0.05$). By comparing patients with recurrent ICH

with patients with isolated ICH, we found that recurrence was associated with more advanced ages at the time of the first ICH, but only for men (76 years for recurrent ICH and 68 years for isolated ICH) ($p < 0.05$). There was a tendency towards recurrence when the bleeding was lobar (33% of recurrence, and 24% for non-lobar bleedings), although no statistical significance could be found. Other factors, such as previous hypertension were not associated with increased risk of recurrent ICH.

Conclusion: In this series of patients, we identified sex and age as predictors for ICH recurrence.

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PS133

Randomized study to compare two methods of e-learning of ECG interpretation among medical students

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Aim: To compare the effectiveness of two methods of ECG e-learning among medical students: collaborative e-learning (C-el) and individual e-learning (I-eL).

Introduction: Electrocardiogram (ECG) interpretation is an essential skill in medicine. The best method of ECG education has not been determined.

Methods: Sixty 5th-year students from the Jagiellonian University Medical College were randomly assigned in a 1:1 ratio to the C-eL and I-eL groups. C-eL group students were further randomly divided into 6 subgroups of 5 students. Students from the I-eL group received by e-mail an ECG recording with comprehensive description every second day; at that time students from the C-eL group received the ECG recording without any description. C-eL students were encouraged to cooperate in analyzing the ECG in subgroups using internet platform and were expected to submit interpretation of the ECG recording to coordinator after 48 h. Afterwards they received comprehensive description of the ECG. Before starting the study all students participated in a pretest assessing their basic theoretic knowledge. The effects of e-learning were assessed at a final e-test. The main endpoint of the study was the number of students who passed the final e-test.

Results: Basic knowledge was similar in both study groups. Students from the I-eL group answered correctly to 9.0 ± 1.0 ($90 \pm 10\%$) and from the C-eL group to 9.5 ± 0.6 ($95 \pm 6\%$) questions, $p = 0.07$.

The main endpoint was achieved more frequently in the C-eL than in the I-eL group: 17 (63%) vs 10 (35.7%) students respectively, $p = 0.045$. C-eL group students, as compared to I-eL group students, achieved more points in the final e-test (12.3 vs. 11.0 points respectively, $p = 0.036$) and also better results in ECG interpretation (4.1 vs. 3.4; $p = 0.03$).

Conclusion: Collaborative e-learning of electrocardiography in 5th year medical students is superior to individual e-learning.

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