

**Conclusion:**

- The most frequent pain treated with NAIDS were menstrual and headache in women group, and in men group back pain and headache.
- Women are tend to use NAIDs against pain 1 time pro month the most of male are tend to use it rare as 1 time pro 6 months.
- Both women and men groups showed lack of information about NAIDS side effects (with women showing more knowledge in gastric ulcer and renal insufficiency as side effect).

**Key Words:** NAID, men – women pain, aspirin, pain management.

## **273. THE ROLE OF LGI PROTEINS IN RAISING NEURONAL EXCITABILITY AND IN EPILEPTOGENESIS**

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**Introduction.** According to WHO approximately 50 million people worldwide have epilepsy, making it one of the most common neurological diseases globally, and about two thirds of them are idiopathic. Certain types of idiopathic epilepsy are developed with the involvement of LGI family proteins. The role of LGI proteins (leucine-rich, glioma-inactivated protein-1) is to regulate synaptic transmission, activity of voltage-gated potassium channel (Kv1.1), and to inhibit neuroblastomas. The goal of this study is to highlight the role of LGI proteins in raising neuronal excitability and epileptogenesis.

**Materials and methods.** 12 articles from relevant scientific journals, as Nature Medicine, SAGE Journals, Journal of Neuroscience, have been studied.

**Results.** Two basic mechanisms are known by which LGI protein is involved in the development of neurological disorders: temporal lobe epilepsy (TLE) caused by mutation in LGI gene, and limbic encephalopathy (LE) caused by presence of antibodies anti-LGI.

At the presynaptic membrane, truncated LGI1 fails to prevent rapid inactivation of the Kv1.1 potassium channel. The consequent high influx of Ca<sup>2+</sup> triggers massive transmitter release of glutamate. Truncated LGI1 also fails to be secreted and does not bind ADAM22 (a disintegrin and metalloprotease domain) and other postsynaptic receptors. The augmented Src kinase activity maintains an immature NMDA receptor composition with high NR2B/NR2A ratio. As a consequence, NMDA receptor– mediated calcium currents last longer and enhance excitatory responses.

Interaction between LGI1 and ADAM23 leads to decrease of seizure threshold, and interaction with ADAM22 reduce decrease expression of AMPA receptors. LGI1 antibodies Associated with LE neutralize the specific protein-protein interaction between LGI1 and ADAM22/ADAM23, inducing epileptogenetic effect.

**Conclusion.** Mutation of LGI1 gene, disruption of interaction between LGI proteins and ADAM proteins, ADAM proteins defects, lead to TLE phenotype, manifested by seizure, halucination, auditive disorders, memory disorders. At the same time the presence of antibodies anti-LGI or anti-NMDA lead to LE, manifesting by lose of memory, irritability, headache, seizures and psychosis.

**Key words:** LGI, epilepsy, mutation.

## 274. BIOCHEMICAL DATA IN ACUTE MYOCARDIAL INFARCTION.

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**Introduction:** Acute myocardial infarction (AMI) is one of the most usual diagnosis in hospitalized patients. Hyperglycemia, hypertension, and hypercholesterolemia evaluated on admission in patients with AMI are considered negative predictors of short- and long-term clinical outcomes.

**Aim:** We performed statistical analyses to identify correlations between biochemical parameters in patients with AMI Associated with hypertension stage II/III.

**Materials and methods:** Our study was performed on 33 patients with AMI admitted to the Intensive Care Unit of the Public Institution Institute of Cardiology. Patients were divided into three groups: L1- AMI Associated with hypertension stage II (n=13); L2- AMI Associated with hypertension stage III (n=8); L3- sham AMI (n=12). On admission in all the patients were evaluated plasma levels of cholesterol, LDL and HDL cholesterol, triglycerides (TAG), and glucose. The obtained data were represented by median and percentiles. For comparison the Mann Whitney and Kruskal-Wallis nonparametric tests were performed using SPSS statistical program.

**Discussion results:** Statistically significant differences were found in parameters of age ( $\chi^2_{26.901}$  df=2 p=0.032) and TAG ( $\chi^2_{26.559}$  df=2 p=0.038). The age of patients in L1 was lower (median 60.0) compared to L2 (median 65.0, Mann-Whitney U=32.0, p=0.161), but higher than in L3 (median 55.0, Mann-Whitney U=16.5, p=0.012). TAG value was higher in L1 (median 2.24) compared to L2 (median 1.35, Mann-Whitney U=22.5, p=0.03) and L3 (median 1.37, Mann-Whitney U=46.5, p=0.91). We noticed a slight difference in value of glucose ( $\chi^2_{24.828}$  df=2 p=0.038): it was lower in L1 (median 6.8) compared to L2 (median 11.2, Mann-Whitney U=27.0, p=0.076) and L3 (median 7.1, Mann-Whitney U=21.0, p=0.039). The investigated groups showed no statistically significant differences in cholesterol value (L1 median 5.5; L2 median 5.35; L3 median 5.3; Kruskal-Wallis test  $\chi^2_{20.688}$  df=2 p=0.709), LDL-cholesterol (L1 median 3.02; L2 median 3.4; L3 median 3.0, Kruskal-Wallis test  $\chi^2_{21.373}$  df=2 p=0.503), HDL-cholesterol (L1 median 1.3; L2 median 1.28; L3 median 1.27, Kruskal-Wallis test  $\chi^2_{21.462}$  df=2 p=0.481).

**Conclusion:** Atherosclerosis is main cause of AMI. Hypertension and hyperglycemia after acute coronary syndrome are Associated with an increased risk of in-hospital mortality and severe complications. The major plasma lipid traits, low-density lipoprotein cholesterol (LDL-C), triglycerides,