- 3. HLA–B 7 allele dominated between kidney recipients with O and A blood groups.
- 4. HLA-DR 8 allele dominated between kidney recipients with O and A blood groups.

**Keywords:** HLA-A, HLA-B, HLA-DR.

# 272. THE PAIN MANAGEMENT AND KNOWLEDGE OF NONSTEROIDICAL ANTI-INFLAMATORY DRUGS (NAIDS) SIDE EFFECTS LINK TO GENDER

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Introduction: Pain is a common medical problem, and relief of pain is an important therapeutic goal. Although mild and moderate pain by outpatients is most commonly treated with over-the-counter drugs. Over the past decade, there have been growing concerns about the harm — abuse, as well as serious injury and death — caused by the use of over-the-counter painkillers. These concerns have emerged in parallel with the evolving understanding of the importance of pain management in medical care. It's important to maintain the balance between providing access to pain medications for those who need them, and on the other hand, managing the variety of risks posed by painkilling drugs. Especially nowadays when drug consumption between society has increased significantly. More and more people have been hospitalized because of these drugs side effects. This fact shows that society in Europe aren't informed about over-the-counter painkillers harmful influence to their health.

The aim of this study is to evaluate factors influencing non prescription drugs against mild-moderate pain choice.

## **Objectives:**

- To determine and compare the most frequent pain type in men and women groups;
- To compare the frequency of NAID's used in pain management in different gender groups;
- To evaluate the Lihtuanian citizens knowledge about NAIDs side effects and compare it in gender groups.

Materials and methods: The online questionnaire form was applied for two biggest Lithuania's cities - Vilnius and Kaunas – citizens. Total 99 respondents in the age of 19-80 years were interviewed. According the gender respondents distributed equally by 51 (51.1%) males and 48 (49.9%) females. IBM SPSS Statistics 19.0 version. For categorical data analysis  $\chi^2$  and Fisher's exact tests were performed. P <0.05 was evaluated as statistically significant.

**Discussion results:** Most women were tend to suffer from pain 1 time per month (41.2%) and the most of men (39.6%) indicated suffering from pain rare than 1 time pro six months, p =0.003. The women were more likely to mark gastric ulcers (68.9%), renal insufficiency (68.4%) as the NAID's side effect than men (31.1%) and 31.65 respectively) The mostly women uses NDAIS for menstrual (66.7%), headache (74.5%), and muscle pain (17.7), as the men uses it for back pain (43.8%) and headache (35.1%), P<0.05. Women (66.7%) were more likely to choose ibuprofen as the man (41.7%), p<0.05. In other NAIDS the consumption choice does not statistically differ.

#### **Conclusion:**

- The most frequent pain treated with NAIDS were menustrual 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 idiopatic. 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 encefalopathy (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 Ca2+ 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 recduce decrease expresion of AMPAreceptors. LGI1 antibodies Associated with LE neutralize the specific protein-protein interaction between LGI1 and ADAM22/ADAM23, inducing epileptogenetic effect.