

**Subjects and methods:** In this cross-sectional study 152 patients were examined. Self-designed questionnaires to examine emotions of the fear, anxiety, nervousness frequency gratitude was used and insecurity immediately before cataract surgery. We also examined what the greatest fear during the cataract surgery was. The fear of blindness was compared with other life fears such as cancer, memory loss, AIDS, stroke and heart attack. The presence of fear was compared in patients having had previous cataract surgery with those undergoing their first cataract surgery. Including criteria were adults with senile cataract. Excluding criteria was ocular co-morbidity, psychiatric disorders, inability to read, deafness and surgery under general anesthesia. Completed questionnaires were analyzed. Pearson's chi-squared test was used.

**Results:** Fear was the most frequent emotion before cataract surgery, present in 60.5% patients. Fear of blindness was the greatest fear during cataract surgery in 55.3% of patients. There was no statistically significant difference in fear in patients having undergone their first cataract surgery and patients before their second cataract surgery ( $p < 0.05$ ).

**Conclusion:** Fear is the predominant emotion before cataract surgery which is in correlation to the leading life fear - fear of blindness. Good preoperative preparation and a trusting doctor-patient relationship are important for reducing the fear of the procedure.

**Key words:** fear - blindness - cataract

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## LEVEL OF DEPRESSION, ANXIETY AND IMPAIRMENT OF SOCIAL RELATIONS WITH REGARD TO PAIN INTENSITY IN A NATURALISTIC SAMPLE OF PATIENTS AT THE OUTPATIENT CHRONIC PAIN CLINIC

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**Background:** A high rate of concurrent depression and anxiety has been identified among the patients of pain clinics. Evaluation of own pain can appear as a perception of being negatively impacted by pain-related suffering in social relations.

**Subjects and methods:** A questionnaire with 228 variables was applied to 109 randomly chosen patients at outpatient pain clinic of the Ljubljana University Clinical Centre. Following summative scores were treated as a set of dependent variables in MANOVA, as a set of predictors in discriminant analysis: level of depression (Zung), level of anxiety (Zung), evaluation of the nature of pain and perceptions of negatively impacted social relations. Actual pain has been self-evaluated on a visual-analogue pain scale from 0 to 10 and recorded in subgroups with a low, middle and high intensity of actual pain (criterion variable).

**Results:** The average age of the participants was  $M=52.7$  years ( $SD 13.9$ ), 70.9 % of them female. Participants with a high intensity of pain were found to have the highest level of depression, the highest level of anxiety and were negatively impacted in their social relations to the greatest extent. Only the first discriminant function was found to be significant ( $p < 0.05$ ). The structure matrix showed a high correlation between anxiety level (0.88) and depression level (0.86), and a low correlation with the perception of negatively impacted social relations (0.57).

**Conclusions:** The results emphasize the connection between pain intensity, anxiety, depression and interpersonal relational issues in the context of patients with chronic pain at an outpatient pain clinic. Anxiety and mood were found to be the best predictors for the perception of pain intensity. The results are preliminary, but significantly support the multidisciplinary collaboration of treatment at a pain clinic with mental health professionals.

**Key words:** chronic pain - anxiety - depression - impact on social relations

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## GENETIC AND EPIGENETIC FINDINGS ON MONOAMINE OXIDASE A GENE IN THE SEE-PTSD COHORT

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**Introduction:** Posttraumatic stress disorder (PTSD) is a syndrome that develops following exposure to traumatic events. There is substantial interindividual variability in the risk of PTSD, which is influenced by a genetic predisposition, specific characteristics of the stress, and epigenetic mechanisms. Association studies for PTSD showed that various neurotransmitter systems may confer susceptibility to PTSD. Monoaminergic transmission is central to wide-ranging behavioral and physiologic functions, including stress responses and mental health. In this paper we provide an overview of genetic and epigenetic findings on monoamine oxidase A gene in the SEE-PTSD cohort.

**Subjects and methods:** The study involved a total of 794 subjects from five sites in three SEE countries (Croatia, Bosnia and Herzegovina and Kosovo) whose population has experienced war trauma. The sample is gender-balanced. The subjects were assessed with standardized psychometric instruments (CAPS, CSRI, BSI and Folkman Lazarus Coping Scale), socio-demographic questionnaire and Life stressor list. We genotyped 385 patients with PTSD (234 with current PTSD and 151 with lifetime PTSD), and 355 healthy probands with no PTSD. Genotypes and alleles distribution of the monoamine oxidase A gene were compared between groups. Monoamine oxidase A methylation was analyzed via direct sequencing of sodium bisulfite-treated DNA extracted from blood cells in a total sample.

**Results:** We found nominally significant genetic associations in PTSD, but none of the associations remain significant when Bonferroni correction was strictly applied. The epigenetic analysis showed hypermethylation of 3 CpGs (CpG3 = 43,656,362; CpG12 = 43,656,514; CpG13 = 43,656,553, GRCh38.p2 Primary Assembly) in the MAOA gene exon1/intron1 region in male with current PTSD, as well as PTSD symptom severity significantly correlated with MAOA methylation.

**Conclusion:** Only nominally significant association was found for the monoamine oxidase A gene in relation to PTSD. The epigenetic findings suggest a role of MAOA hypermethylation as an epigenetic marker of PTSD.

**Key words:** posttraumatic stress disorder, MAOA gene, DNA methylation, epigenetics

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