

Introduction: The problem of coexistence of heteroaggression and autoaggression most clearly manifests itself in the field of forensic psychiatry. For example, in Russia, about 25% of criminals who committed aggressive actions had a history of suicide attempts.

Objectives: Identification of specific personality traits in individuals with multidirectional aggression.

Methods: In a continuous one-step study, relatively sane adults of both sexes were examined: 38 persons undergoing forensic examination with multidirectional aggression and 34 violent criminals. A wide range of forensic psychological techniques is used to identify aggression, suicidogenic and inhibitors of aggression. Nonparametric statistical methods were used: Spearman rank correlation coefficient (r) and Mann-Whitney (U).

Results: The leading role in the genesis of multidirectional aggression, in contrast to other types of aggression, playing the combination ($p < 0.01$) to the presence of motivational aggressiveness (according to the Hand Test, $U = 556.6$; $p = 0.046$) and the willingness to show negative feelings at the slightest arousal (annoyance, irascibility according to BDHI, $U = 468.2$; $p = 0.012$), along with suicidal personal qualities, which is combined with the deficiency of auto- and heteroaggression inhibitors (value orientations; socio-normative, dispositional, communicative, emotional inhibitors, coping strategies, etc.). However, the psychological mechanisms of multidirectional aggression are relatively non-nospecific and are similar in mentally healthy individuals and individuals with personality and organic mental disorders.

Conclusions: Multidirectional aggression in view of the increased risk of recidivism and personal and public danger should be taken into account by forensic experts when recommending psychocorrective measures in places of deprivation of liberty.

Disclosure: No significant relationships.

Keywords: Aggression; risk assessment; motivational aggressiveness; combined autoaggression and heteroaggression

EPV0329

Relationship between the sexual abuser and the victim

L. Tumbev^{1*}, P. Chumpalova¹, M. Stoimenova-Popova¹, V. Valtchev² and E. Tumbeva³

¹Medical Psychology And Psychiatry, Medical University, Pleven, Bulgaria; ²Department Of Biochemistry And Physiology, National Sports Academy, Sofia, Bulgaria and ³Faculty Of Public Health, Department Of General Medicine, Forensic Medicine And Deontology, Medical University, Pleven, Bulgaria

*Corresponding author.

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Introduction: Although much of society believes that the sexual aggressor is unknown to the victim, this is not supported by the literature. In most cases, the rapist is a known, former or current intimate partner of the victim or even a family member.

Objectives: 189 persons accused of perpetrators of sexual crimes and who were subject to forensic psychiatric evaluation for the period from January 2010 to December 2019 in the territory of Central Northern Bulgaria were examined.

Methods: The current research uses sociological methods to gather information - interviews, observations, research of forensic and medical documents,

Results: In the study group, 62% of the victims were known to the perpetrator of the sexual crime, 11% were part of the nuclear family and 8% were members of the extended family of the perpetrator.

Conclusions: Our data supports data from previous studies

Disclosure: No significant relationships.

Keywords: sexual crimes; victim; relationship

EPV0330

Characteristics of offenders referred for psychiatric forensic examination

R. Felhi*, G. Hamdi, H. Ben Ammar and R. Ridha

Psychiatry, Razi hospital, Manouba, Tunisia

*Corresponding author.

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Introduction: Forensic psychiatry is facing major challenges related to criminal responsibility with an increasing number of offenses and the entanglement of several factors affecting offenders differently.

Objectives: The aim of this study is to determine the characteristics of offenders referred for forensic psychiatric examination.

Methods: We studied the medical files of all the offenders referred to the forensic psychiatry unit in Razi hospital for an examination between January 2010 and October 2020.

Results: The number of people who have undergone a forensic psychiatric examination was 256. Three files were not usable due to lacking data. The offenders were men in 95.7% (242) of the cases. Their average age was 35 years with a range of 17-53 years. They were mostly single (64%) with primary education (58.1%). Forty percent of the studied population were unemployed and 70% of them lived with their parents. Drug abuse was found in half of the cases and the average number of taken drugs is two illicit substances per person. A criminal record was found in 43% of the cases with an average number of two offenses per person. Offenders were found to suffer from schizophrenia in 29% of the cases, personality disorder in 17% of the cases and from intellectual disability in 16.6% of the cases. No psychiatric disorder was found in 24% of the cases

Conclusions: Despite having in common many vulnerability factors, such as low educational level, unemployment and drug abuse, an important number of offenders referred for forensic psychiatric examination weren't affected by a psychiatric disorder.

Disclosure: No significant relationships.

Keywords: forensic examination; Clinical characteristics; Criminal responsibility

Genetics & molecular neurobiology

EPV0331

Toxic accumulation of copper and neuropsychiatric symptoms due to a familial tunisian compound heterozygous ATP7B missense mutation

N. Abdelmoula

Genomics Of Signalopathies At The Service Of Medicine, Medical University of Sfax, Sfax, Tunisia
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Introduction: Wilson disease (WD) is an autosomal recessive genetic disorder caused by loss-of-function mutations in the P-type copper ATPase, ATP7B (ATPase copper-transporting beta), which transports copper out of cells. It is characterized by toxic accumulation of copper primarily in the liver and brain, leading to liver disorders and/or neuropsychiatric symptoms.

Objectives: Here, we report a Tunisian pedigree associated to familial ATP7B gene mutation.

Methods: Medical genetic investigations, and molecular screening of ATP7B gene mutations were performed to a Tunisian three-generation pedigree with eight members having neuropsychiatric symptoms. Molecular genetic testing of the ATP7B 21 exons was carried out by direct sequencing.

Results: A compound heterozygote mutational status of ATP7B with 2 substitutions: p.H1069Q and p.D642H was found. The family originated from the city of Sfax (Tunisia) showed a pronounced amount of consanguinity and eight members affected by WD. All cases derived from consanguineous couples and harbored psychiatric disorders associated or not to neurologic symptoms. Diagnosis of WD was piloted first through the cases harbouring intention tremor in the upper limbs and ataxia associated with psychiatric symptoms.

Conclusions: The first missense mutation p.H1069Q - c.3207C>A (CAC-CAA) (exon 14) is the most commonest mutation in WD associated with late onset neurological conditions in Europe (Natural variantVAR_000758 dbSNP:rs76151636). The second missense mutation in exon 6 : p.D642H - c.1924G>C (GAC-CAC) (Natural variantVAR_000713 dbSNP:rs72552285) affects the domain affinity to copper or the folding structure in the cytoplasmic region and decreases the stability, leading to abnormal localization of the protein within cytoplasm and an impairment of protein function.

Disclosure: No significant relationships.

Keywords: ATP7B; Copper; Neuro-psychiatric symptoms; Wilson disease

EPV0333

A populational review of the amyloid precursor protein gene mutations relevant to alzheimer's disease

L.M. Balmus^{1*}, A. Ciobica^{2,3,4} and L.D. Gorgan³

¹Department Of Interdisciplinary Research In Science, Alexandru Ioan Cuza University of Iasi, Iasi, Romania; ²Center Of Biomedical Research, Romanian Academy, Iasi, Romania; ³Department Of Biology, Faculty Of Biology, Alexandru Ioan Cuza University of Iasi, Iasi, Romania and ⁴Department Of Biology, Academy of Romanian Scientists, Bucharest, Romania

*Corresponding author.

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Introduction: The genetic component of Alzheimer's disease was previously studied and more than sixty amyloid precursor protein (APP) gene mutations were identified. However, the populational aspects of this component were scarcely discussed despite that many of the reports mentioned the demographic ancestry of the carriers or probands.

Objectives: In this short study, we aimed to review the APP gene mutations relevant to Alzheimer's disease from a Populational Genetics point of view by evaluating the current literature for the demographic description of the carriers or families in which the mutations were identified.

Methods: In this regard, multiple genetic studies on the APP gene mutations relevant to Alzheimer's disease were reviewed and the incidence of the mutations was analyzed considering the ancestry of the patients.

Results: We found many possible scenarios regarding the incidence of the APP gene mutations in Alzheimer's disease patients and general population. On the one hand, we could identify several mutations which were present in more than one population (eg. V615M, V717I, V717L) and on the other hand, some mutations could be observed in certain populations (eg. E693delta, the Osaka mutation, which was until now observed in Japanese patients, while E693G was found in a Swedish family). One particular case is that of the isolated populations (eg. the Icelandic population in which an APP mutation protecting against Alzheimer's disease is more frequent in the general population as compared to the patients).

Conclusions: We were able to identify several mutations which were characteristic to many populations, but also some population-specific features regarding the APP genotypes.

Disclosure: No significant relationships.

Keywords: Alzheimer's disease; amyloid precursor protein; Populational Genetics

EPV0334

Association between IL-17, IL-23 with neurocognitive scales in patients with Alzheimer's disease

I. Mudrenko and O. Chyniak*

Department Of Neurosurgery And Neurology, Sumy State University, Sumy, Ukraine

*Corresponding author.

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Introduction: Alzheimer's disease (AD) is a degenerative brain disease and the most common cause of dementia. Evidence suggests that various cytokines, including interleukins (IL) IL-6, IL-10, IL-12 are actively involved in the pathogenesis of AD. The role of IL-17 and IL-23 is less clear.

Objectives: To investigate the correlations between IL-17, IL-23, and neurocognitive scales in patients with Alzheimer's disease.

Methods: The study included 45 patients: 15 patients with Alzheimer's disease and 30 patients without cognitive deficit (control group). Clinical and psychometrical methods were used: Mini Mental State Examination (MMSE) scale; Montreal Cognitive Assessment (MoCA), Frontal Assessment Battery (FAB), Alzheimer Disease Assessment Scale-cognitive (ADAS-cog). Serum levels of cytokines of IL-17 and IL-23 were analyzed by sandwich ELISA on "Chem Well 2900" immunoanalyzer (Awareness Technology, USA).

Results: A significantly positive correlation was observed between IL-17 and IL-23 for all AD patients ($r = 0.723$, $p = 0.002$). A significant inverse correlation was observed between serum concentration of IL-17 and MoCA score ($r = -1.0$, $p \leq 0.0001$) and IL-23 and MMSE score ($r = -0.553$, $p = 0.032$) in all AD patients. However, no other significant correlations were found between IL-17 and the