

Token Motor Task scores and trihexyphenidyl dose ($r_{xy} = -0.496$, p -value = 0.002). At both weeks 2 and 8, there was a negative relationship between age and Symbol Coding scores ($r_{xy} = -0.387$, p -value = 0.018; $r_{xy} = -0.35$, p -value = 0.034, respectively). Verbal Fluency scores were lower in patients with high scores on the PANSS excitement component and at week 2 ($r_{xy} = -0.42$, p -value = 0.01), this trend continued at week 8 ($r_{xy} = -0.31$, p -value = 0.063). Tower of London scores were negatively associated at week 8 with cognitive and positive PANSS scores ($r_{xy} = -0.46$, p -value = 0.004; $r_{xy} = -0.336$, p -value = 0.042, respectively). **Conclusions:** Thus, we have demonstrated that cognitive impairment in patients with schizophrenia is associated with various factors, and not only antipsychotic treatment.

Disclosure of Interest: None Declared

O0128

Changes in inflammatory parameters and their impact on clinical symptoms in patients suffering from schizophrenia

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Introduction: One of the factors influencing the symptoms of schizophrenia, which may indicate changes in the cognitive functioning of patients, is the fluctuating level of inflammatory cytokines.

Objectives: The aim of the review was to analyze the available literature on the importance of selected inflammatory factors [interleukin-1 β (IL-1 β), interleukin-6 (IL-6), interleukin-8 (IL-8), interleukin-10 (IL-10), of tumor necrosis α (TNF- α)] in schizophrenia and the assessment of the impact of changes in cytokine levels on the occurrence of schizophrenia symptoms.

Methods: For this purpose, available scientific publications from following databases: PubMed, Scopus, Google Scholar were used to prove that the levels of selected inflammatory parameters changed in people suffering from schizophrenia. Moreover, fluctuations in cytokine concentrations influenced the occurrence of negative symptoms of schizophrenia, including cognitive disorders, as well as psychotic symptoms.

Results: An increase in the concentration of IL-1 β in the cerebrospinal fluid of patients with the first episode of schizophrenia has been described, which may indicate the involvement of the cytokine in the inflammatory process involving the CNS. The increased level of IL-6 is associated with the occurrence of psychotic disorders, it is also noted in stressful conditions. IL-6 is qualified as an indicator of exacerbation of schizophrenia, which normalizes after antipsychotic treatment. In the blood of patients with paranoid schizophrenia, elevated levels of IL-8 and IL-6 were detected compared to healthy individuals, which indicates the development of an inflammatory process in schizophrenia. The relationship between the level

of IL-8 in women in the second trimester of pregnancy and the risk of developing schizophrenia spectrum disorder in children has been proven. Untreated patients with acute psychotic symptoms showed an increase in the level of TNF- α in the blood serum (compared to healthy subjects). An increase in the level of TNF- α in the blood serum of patients with an acute relapse of schizophrenia or the first episode of psychosis was also demonstrated. In conclusion, the relationship of IL-6 and TNF- α with the occurrence of psychotic disorders, the relationship of IL-1 β with the appearance of changes in mood, behavior, including cognitive dysfunction, the relationship of IL-8 with the risk of developing schizophrenia spectrum disorder in children, the relationship of reduced concentrations of IL-10 with the intensification of negative symptoms, including cognitive deficits.

Conclusions: In conclusion, the analysis showed that patients with schizophrenia fluctuate in the concentration of inflammatory cytokines, which affects the occurrence of clinical symptoms.

Disclosure of Interest: None Declared

O0129

Changes in quality of life in treatment-resistant schizophrenia patients undergoing VR-assisted therapy for auditory verbal hallucinations: A content analysis

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Introduction: VR-Assisted Therapy (VRT) for auditory verbal hallucinations has been demonstrated to have a significant impact on the symptoms, beliefs, and quality of life of patients with treatment-resistant schizophrenia. However, little is known about how these changes are implemented into their lives and on which aspects these improvements occur.

Objectives: This study aimed to qualitatively explore changes in the quality of life of patients who underwent VRT in the context of an ongoing clinical trial.

Methods: Ten consecutive patients enrolled in an ongoing clinical trial were assessed using semi-guided interviews before as well as 3 months after VRT. These encounters have been recorded and transcribed. Then, the content of the participants' discourse was thoroughly analyzed, leading to the generation of an extensive theme grid. Each utterance was then coded by at least two members of the research team, and each disagreement was then discussed in a group format until a consensus was reached. As the cases were analyzed, the grid was adapted in a back and forth manner. New participants were included until data saturation occurred.

Results: The content analysis allowed the identification of nine main themes representing different aspects of the patients' quality

of life: psychiatric symptomatology, identity, occupations, wishes, interpersonal relationships, lifestyle, psychiatric follow-up, life events, and attitudes/behaviors during the interview. Each theme was then subdivided into more specific codes. By analyzing the evolution of the frequency of each subtheme, it was observed that, following therapy, patients presented with less psychotic symptoms, which were also perceived more positively, a better self-esteem, more hobbies and projects, as well as an overall improved lifestyle and mood.

Conclusions: Investigating how VRT impacts the patients' quality of life allows for a deeper understanding of how people with treatment-resistant schizophrenia can achieve meaningful changes and move towards a certain recovery process.

Disclosure of Interest: None Declared

00130

Comparison of VR-Assisted Therapy to Cognitive-Behavioral Therapy in the treatment of verbal hallucinations in patient with treatment-resistant schizophrenia

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Introduction: Auditory verbal hallucinations (AVH), which often present in individuals with schizophrenia, can cause great psychological distress. Although antipsychotic medication can reduce AVH, 30% of patients will be resistant. Treatment resistance could be associated with important consequences, and there are only few treatment alternatives. Unfortunately, more than 50% of patients will not respond favorably to the best available psychological therapy, cognitive-behavioral therapy (CBT). However, using virtual reality (VR), our research team has adapted a therapy whose goal is to recreate the faces and voices of the patients' persecutory voices as avatars. By interacting with an external representation of their hallucinations, patients implement new strategies to control their voices and to regulate their emotions. A small clinical trial (proof of concept) has demonstrated the safety and validity of this therapy as well as its superiority compared to the usual treatment.

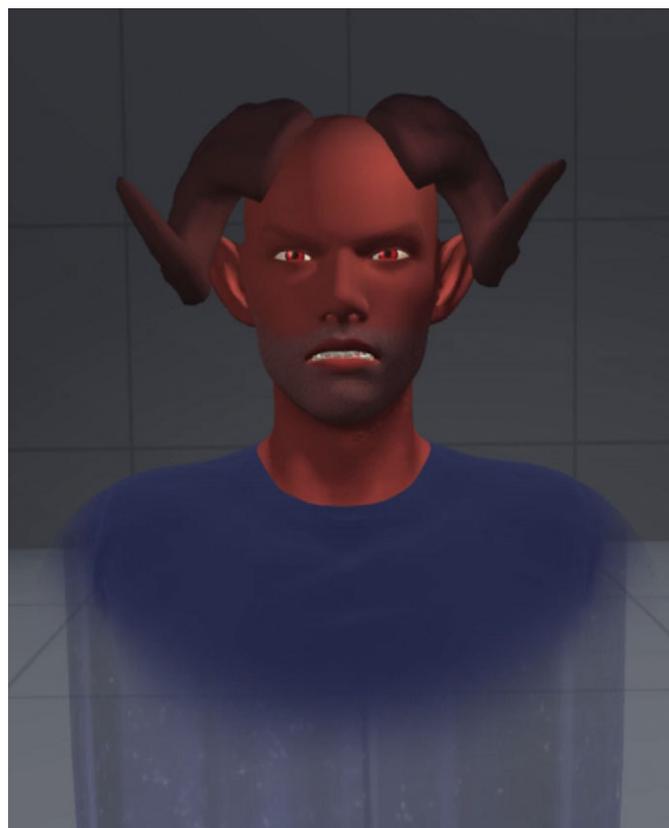
Objectives: (1) To verify whether VR-Assisted Therapy (VRT) is superior to CBT for the treatment of AVH; and (2) to examine the effects of VRT and CBT on the symptomatology and quality of life.

Methods: For this single-blind randomized controlled clinical trial, 136 patients will be recruited (68/intervention) The effects on psychotic symptomatology as well as on quality of life is assessed using standardized questionnaires. Patients are included if they hear persecutory voices and have not responded to at least 2 trials of antipsychotics. Both groups are randomized from an external site and begin with an initial clinical assessment prior to randomization. Participants then receive 9 weekly one-hour therapy sessions

(CBT or VRT), beginning the following week. A second clinical evaluation is carried out one week after the last session. A linear mixed effects model will be used to compare the effects of the 2 interventions.

Results: Results from a pilot randomized comparative trial evaluating the short- and long-term efficacy of VRT over CBT for patients with treatment-resistant schizophrenia (N=37/group) showed that both interventions produced significant improvements in AVH severity and depressive symptoms. Although results did not show a statistically significant superiority of VRT over CBT for AVH, VRT did achieve larger effects particularly on overall AVH ($d = 1.080$ for VRT and $d = 0.555$ for CBT). The recruitment of the current clinical trial is in progress.

Image:



Conclusions: VRT, which is currently under clinical investigation, presents itself as an interesting complement to existing pharmacological treatments. Since VR technologies allow the recreation of scenarios that are nearly impossible to reproduce in real life, VR-assisted psychotherapy could eventually become an integral part of our clinical practices.

Disclosure of Interest: None Declared