

self-injury (NSSI) was considered. Articles [meta-analyses (A), reviews (B), and original studies (C)] published between 2014 and 2017 were included.

**Results.**–

– different psychotherapies seemed to be efficacious in the reduction of both SA and NSSI. After a recent SH episode, Cognitive Behavior Therapy (CBT) and Problem-Solving Therapy (PST) were associated with fewer SH repetition at follow-up and SI improvement. Dialectical Behavior Therapy (DBT) was found to reduce SH frequency. Interventions directly addressing suicidal thoughts and behavior during treatment were effective immediately post-treatment and long term on SD and SA, whereas treatments addressing symptoms indirectly associated with suicide (e.g., hopelessness, depression, anxiety, quality of life) were effective only at long term;

– concerning children and/or young people, effective treatments were: CBT (SH and SI), PST (SI), and interpersonal psychotherapy (IPT) (SI). Similarly, promising interventions for elderly in reducing SI were PST and IPT;

– Abandonment Psychotherapy was superior to treatment as usual in reducing suicidal relapse and SI both if administered by certified psychotherapists and nurses. Moreover, Acceptance and Commitment Therapy was found to reduce SI.

**Conclusions.**– Results indicated an encouraging growth of this research field in the last years and the presence of a number of promising interventions.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OR0105

### Altered Th17 pathway in schizophrenia: Evidences from genetic, gene expression and biochemical studies

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**Introduction.**– The immuno-inflammatory origin has emerged as a paradigmatic underlying mechanism of schizophrenia in recent times. However, the molecules or cells that confer major effect are yet to be discerned. Th17 cells, a recently identified lineage of T lymphocyte have been demonstrated as a predominant inducer of autoimmunity/inflammation in various pathological conditions. Altered levels of cytokines like IL-17, IL-23, and IL-22 indicate a dysregulated Th17 pathway in schizophrenia. However, understanding of genetic and transcriptional regulation of this pathway is currently unknown in schizophrenia.

**Objectives.**– To understand the role of Th17 pathway in schizophrenia by examining genetic variation within *IL17* gene, quantifying gene expression of transcription factors like RORC and STAT3 and determining plasma levels of fifteen cytokines belonging to Th17 pathway.

**Methods.**– *IL17* (rs2275913; G197A) genotyping was done in 221 schizophrenia patients and 223 healthy subjects by PCR-RFLP method. Quantification of lymphocyte gene expression of RORC and STAT3 was performed using TaqMan assay. Plasma levels of a panel of fifteen Th17 pathway related cytokines were estimated by Multiplex Suspension Array in Bioplex platform.

**Results.**– RORC gene expression was significantly higher in schizophrenia patients [ $F(1, 103)=5.89$ ;  $P=0.017$ ; partial  $\eta^2=0.054$ ]. Female schizophrenia patients carrying AA geno-

type of *IL17* (G197A polymorphism) exhibited higher score of bizarre behaviour [ $F(2,161)=4.82$ ;  $P=0.009$ ;  $\eta^2=0.057$ ] and apathy [ $F(2,161)=3.69$ ;  $P=0.027$ ;  $\eta^2=0.044$ ]. In addition, significantly elevated levels of IL-6 ( $P=0.012$ ) and IL-22 ( $P<0.01$ ) were observed in schizophrenia patients.

**Conclusions.**– Our findings suggest a possible role Th17 pathway in the pathobiology of schizophrenia.

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OR0106

### Alterations in bioelectric activity of the brain and therapeutic effects of neurofeedback in stroke patients with depressive states

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**Introduction.**– Post-stroke depression may be related both to situation and to alterations in brain physiology. Thus, neurophysiological approach may be reasonable.

**Objectives.**– To study the bioelectric activity of the brain and effects of neurofeedback in stroke patients with depressive states.

**Methods.**– The study included 25 stroke patients who underwent 17 sessions of neurofeedback during a 28-days period. Assessment included Beck Depression Inventory, State-Trait Anxiety Inventory, Hospital Anxiety and Depression Scale, quantitative EEG.

**Results.**– Strong correlations ( $r>0.8$ ,  $P<0.01$ ) of depression severity with beta-rhythm were found in left occipital, frontal, central parts. Average correlations ( $r>0.3$ ) of depression severity with alpha rhythm were recorded in the left occipital-temporal area, with theta rhythm in the left occipital region, with beta rhythm over all areas, especially in the left hemisphere. The recall of the stroke psychotrauma was associated with regression of the beta and alpha rhythms and with growth of the theta rhythm. After 15 neurofeedback trainings a tendency towards normalization of brain activity was noticed: a decrease in alpha rhythm in both hemispheres in 1.24–1.95 times, in theta rhythm in 1.11–1.51 times, an increase in beta rhythm in 1.14–1.49 times, which correlated with a decrease in the severity of the depressive state.

**Conclusions.**– Post-stroke depressive states are related to alterations in brain bioelectric activity across a wide range of rhythms and brain areas. Neurofeedback treatment results in concomitant improvements in neurophysiological and emotional states.

**Disclosure of interest.**– The authors have not supplied a conflict of interest statement.

OR0107

### The genetics of cognitive functions in major depressive disorder. A review

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**Introduction.**– Cognition represents mental processes that interpret the world, organize feelings, communicate, think and remember. Those activities are impacted during major depressive disorders (MDD). Cognition has a genetic base. A better understand-