### **EPP0259**

### Predictors of compliance in adolescents with type 1 diabetes mellitus

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**Introduction:** Non-compliance is a common problem in diabetes despite of the potentially drastic consequences. The study of the factors of compliance in adolescents with diabetes is not only important due to the possible practical implementations in health care, but also may be threated as a model for understanding the age-specific aspects of compliance behaviours.

**Objectives:** The study was aimed to evaluate various, primary family-related, factors contributing to compliance behaviour.

**Methods:** Participants: 71 adolescents (f=44, m=27, age: 13-17) with diabetes mellitus type 1, without insulin pump usage, and their mothers. Instruments: compliance was accessed with MMAS and "Degree of compliance" (for 15-17-olders only) scales. Paternal attitudes were assessed by (1) ADOR questionnaire, yielding scores for: Positive interest, directiveness, hostility, autonomy, inconsistency; (2) Family anxiety analysis questionnaire, with scales: guilt, anxiety, tension. Illness attitudes were assessed with the Concerns of the illness progression model questionnaire. Interview data were used to assess such variables as duration of illness, frequency of therapist consultations y etc.

**Results:** Stepwise regression analysis suggested the best model for compliance being predicted (R2=.203) by family anxiety (beta=-.406, p<.001), duration of illness (beta=-.218, p<.05) and frequency of consultations (beta=.0212, p<.05). For 15-17-olders only compliance was better predicted (R2=.499) by concerns about illness (beta=.876, p<.001), distraction copings (beta=.501, p=0.001), negative thinking (beta=-.421, p<0.02) and frequency of consultations (beta=.274, p<.05).

**Conclusions:** Low family anxiety, shorter duration, and more frequent contacts with therapist, as well as productive copings, absence of frequent negative thoughts and fantasies about illness contribute to compliance. Negative emotions hamper compliance instead of fostering it.

Keywords: compliance; diabetes; adolescents

#### **EPP0258**

## Neuropsychiatric complications of traumatic brain injury

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**Introduction:** Traumatic brain injury (TBI) is a leading cause of morbidity and mortality, giving rise to a variety of neuropsychiatric syndromes associated with great functional impairments, chronic

disability and poor quality of life. Depending on diagnostic criteria, 20-90% of victims of TBI develop at least one neuropsychiatric manifestation in the first month, and about 40% present at least three symptoms during three months, with higher incidence in females. Survivors of TBI are at increased risk for development of severe, long-term psychiatric disorders. The aetiology of these disturbances remains unclear.

**Objectives:** To review current knowledge on the neuropsychiatric consequences associated with TBI.

**Methods:** Non-systematic review of literature through search on PubMed/MEDLINE database for publications up to 2020, following the terms "traumatic brain injury" and "neuropsychiatry".

**Results:** Although the experience of neuropsychiatric symptoms may be temporary and may resolve in the acute period, many patients with TBI can experience psychopathology that is persistent or that develops in the post-acute period, regardless of injury severity. These symptoms can involve personality changes, psychosis, major depression, generalized anxiety disorder, post-traumatic stress disorder, maladaptive social behaviours, poor disability adjustment, reduced coping skills and cognitive impairment. Evidence remains insufficient to conclude the role of TBI-related neuropathological consequences in the development of post-TBI neuropsychiatric disorder. Non-organic factors are also implicated in its generation and maintenance.

**Conclusions:** Neuropsychiatric sequelae are common following TBI. Several of these syndromes are amenable to treatment. Further investigations are required to better understand the mechanistic aetiology of these conditions and the effectiveness of therapeutic modalities.

**Keywords:** postconcussion; traumatic brain injury; neuropsychiatry

### EPP0259

# Antioxidant capacity as a novel biomarker of delirium after cardiac surgery

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doi: 10.1192/j.eurpsy.2021.675

**Introduction:** Coronary-artery bypass graft (CABG) surgery is known to improve cardiac function and decrease mortality, albeit, this method of treatment is associated with a high risk of postoperative delirium. The pathophysiology of delirium after cardiac surgery is largely unknown.

**Objectives:** To investigate whether oxidative stress reflected by decreased preoperative and postoperative plasma antioxidant capacity (AC) is independently associated with delirium after cardiac surgery. Furthermore, to assess whether the association