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**0099**

### **A pilot project exploring the utility and acceptability of a socially-assistive robot in an assessment unit for people with neuropsychiatric symptoms**

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**Objectives** Socially-assistive robots have been used with older adults with cognitive impairment in residential care, and found to improve mood and well-being. However, there is little known about the potential benefits in adults with other neuropsychiatric symptoms.

**Aims** The aim of this project was explore the utility and acceptability of a socially-assistive robot in engaging adults with a variety of neuropsychiatric symptoms.

**Methods** Betty, a socially-assistive robot was installed in a unit which specialises in the assessment and diagnosis of adults presenting with neuropsychiatric symptoms. She is 39 cm tall, has a baby-face appearance and has the ability to engage individuals through personalised services which can be programmed according to individuals' preferences. These include singing songs and playing games. Training for the nursing staff who were responsible for incorporating Betty into the unit activities was provided. The frequency, duration and type of activity which Betty was involved in was recorded. Patients admitted who could provide informed consent were able to be included in the project. These participants completed pre- and post-questionnaires.

**Results** Eight patients (mean age 54.4 years, SD 13.6) who had diagnoses ranging from depression and schizophrenia participated. Types of activities included singing songs, playing Bingo and reading the news. Participants reported that they were comfortable with Betty and did not feel concerned in her presence. They enjoyed interacting with her.

**Conclusions** This pilot project demonstrated that participants found Betty to be acceptable and she was useful in engaging them in activities. Future directions would involve larger sample sizes and different settings.

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**0100**

### **Risperidone-treated children and adolescents with behavioral disorders: Do drug dose and patients' gender and age relate to drug and metabolite plasma levels?**

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**Introduction** Behavioral disorders, such as conduct disorder, influence choice of treatment and its outcome. Less is known about other variables that may have an influence.

**Objectives/Aims** We aimed to measure the parent drug and metabolite plasma levels in risperidone-treated children and adolescents with behavioral disorders and investigate the role of drug dose and patients' gender and age.

**Methods** We recruited 115 children/adolescents with DSM-5 behavioral disorders (females=24; age range: 5–18 years) at the Departments of Psychiatry of the Hospitals of Bolzano, Italy, and Innsbruck, Austria. We measured risperidone and its metabolite 9-hydroxyrisperidone plasma levels and the parent drug-to-metabolite ratio in the plasma of all patients by using LC-MS/MS. A subsample of 15 patients had their risperidone doses measured daily. We compared risperidone and 9-hydroxyrisperidone plasma levels, as well as risperidone/9-hydroxyrisperidone ratio, in males vs. females and in younger ( $\leq 14$  years) vs. older (15–18 years) patients by using Mann-Whitney U test. We fitted linear models for the variables "age" and "daily risperidone dose" by using log-transformation, regression analysis and applying the R2 statistic.

**Results** Females had significantly higher median 9-hydroxyrisperidone plasma levels ( $P=0.000$ ). Younger patients had a slightly lower median risperidone/9-hydroxyrisperidone ratio ( $P=0.052$ ). At the regression analysis, daily risperidone doses and metabolite, rather than parent drug-plasma levels were correlated ( $R^2=0.35$ ).

**Conclusions** Gender is significantly associated with plasma levels, with females being slower metabolizers than males. Concerning age, younger patients seem to be rapid metabolizers, possibly due to a higher activity of CYP2D6. R2 suggests a clear-cut elimination of the metabolite.

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**0101**

### **Grey matter volume patterns in thalamic nuclei are associated with schizotypy in healthy subjects**

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**Introduction** Schizotypy refers to a set of temporally stable traits that are observed in the general population and that resemble, in attenuated form, the symptoms of schizophrenia. In a previous work, we identified volumetric patterns in thalamic subregions which were associated with disease status, and trained a random forests classifier, accounting for such thalamic volumetric patterns, that discriminated healthy controls (HC) from patients with schizophrenia (SCZ) (81% accuracy) [1].

**Objectives** i) to assess performance of random forests classifier developed by Pergola and coworkers [1], in an independent sample of healthy subjects; ii) to test whether false positives (FP), i.e. HC classified as SCZ based on such classifier would be associated with greater schizotypy compared with true negatives (TN), i.e. HC classified as such.