before going to bed in the first week and two drops to each side were administered subsequently. Informed consent was given by the patient.
Results No psychological, neurological, autonomic and other side effects were observed associated with tropicamide. On VAS, the patient rated hypersalivation 5/7 at baseline, 4/7 after one drop each, 3/7 after two drops each.
Conclusions The reduction of CIS by oral use of tropicamide eye drops is promising and should be explored with randomized controlled trials.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2009

EV1025

The therapeutic potential of natural compounds against Alzheimer's disease: A preclinical pharmacological study in both sexes

N. Kokras[1,2,*], M. Dimitriadou[2], I. Sotiropoulos[2,3], A.L. Skaltsounis[4], A. Tsarbopoulos[2,5], C. Dalla[2]
[1] *Medical School, University of Athens, First Department of Psychiatry, Athens, Greece*
[2] *Medical School, University of Athens, Department of Pharmacology, Athens, Greece*
[3] *School of Health Sciences, University of Minho, Life and Health Sciences Research Institute ICVS, Braga, Portugal*
[4] *Faculty of Pharmacy, University of Athens, Department of Pharmacognosy and Natural Products Chemistry, Athens, Greece*
[5] *GAIA Research Center, The Goulandris Natural History Museum, Bioanalytical Department, Kifissia, Greece*
* *Corresponding author.*

Alzheimer's disease (AD), a neurodegenerative neuropsychiatric disorder, is often comorbid with depression and anxiety. Neuropsychiatric disorders are also characterized by sex differences. However, most preclinical pharmacological studies are conducted using only males. Herein, we used male and female twelve-month-old mice (3xTg) expressing mutated forms of human proteins Tau, APP and Presenilin1. These mice are considered a valid animal model of AD. We investigated the effects of the natural compound trans-crocin-4 (TC-4), which is derived from Crocus sativus and the olive compound oleuropein on the cognitive, depressive and anxious profile of 3xTg mice. We found that male and female 3xTg mice exhibited reduced locomotor activity and oleuropeine treatment (100 mg/kg i.p., for 21 days) did not reverse this phenotype. In addition, anxiety- and depressive-like behaviors were not affected by genotype, sex or oleuropeine treatment. Interestingly, oleuropeine exhibited a tendency to enhance cognitive performance in male 3xTg mice. Treatment with TC-4 (50 and 150 mg/kg, i.p., acutely or chronically for 10 days) affected locomotor activity in a sex-differentiated manner. Interestingly, acute TC-4 clearly enhanced cognitive performance in all groups although it reduced center entries in the open field. Additionally, chronic TC-4 treatment enhanced novel object discrimination mainly in male 3xTg mice. Our findings highlight the potential of those natural compounds, which warrant further investigation but also emphasize the benefits of including both males and females in preclinical pharmacological studies.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2010

EV1026

A comparison of risperidone and olanzapine in the acute treatment of persistent delusional disorder: Data from a retrospective chart review

K. Kulkarni[1,*], R. Arasappa[1], K. Prasad[1], A. Zutshi[2], P. Chand[1], K. Muralidharan[1], P. Murthy[1]
[1] *National Institute of Mental Health & Neurosciences, Psychiatry, Bangalore, India*
[2] *Epworth Hospital, Psychiatry, Melbourne, Australia*
* *Corresponding author.*

Introduction There is a lack of pharmacological trials studying drug response in Persistent Delusional Disorder (PDD) to guide clinical practice. Available reviews of retrospective data indicate good response to second-generation antipsychotics, but even such data from India is sparse.
Objectives and aims We aimed to compare the response of acute PDD to risperidone and olanzapine in our retrospective review.
Methods We conducted a retrospective chart review of patients diagnosed with PDD (ICD-10) from 2000 to 2014 ($n = 455$) at our Center. We selected the data of patients prescribed either olanzapine or risperidone for the purpose of this analysis. We extracted data about dose, drug compliance and response, adverse effects, number of follow-up visits and hospitalizations. The study was approved by the Institute Ethics Committee.
Results A total of 280/455 (61%) were prescribed risperidone and 86/455 (19%) olanzapine. The remaining ($n = 89$; 20%) had received other antipsychotics. The two groups were comparable in sociodemographic and clinical characteristics of PDD. Compliance was good and comparable in both groups (> 80%, $P = 0.2$). Response to treatment was comparable in both groups (85% partial response and > 52% good response, all $P > 0.3$). Olanzapine was effective at lower mean chlorpromazine equivalents than risperidone (240 vs. 391, $P < 0.05$).
Conclusion Our study indicates a good response to both risperidone and olanzapine, if compliance to treatment can be ensured. In the absence of specific treatment guidelines for PDD, second-generation antipsychotics like risperidone and olanzapine offer good treatment options for this infrequently encountered and difficult to treat psychiatric disorder.
Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2011

EV1027

Effects of typical and atypical antipsychotics on spontaneous neuronal network activity in vitro

C. Lange-Asschenfeldt*, U. Henning, P. Görtz
Heinrich-Heine-University Duesseldorf, Psychiatry and Psychotherapy, Duesseldorf, Germany
* *Corresponding author.*

Introduction Microelectrode arrays (MEAs) with cultured neuronal networks are highly suitable to quantify neuroactive activity and neurotoxicity of applied substances.
Objective Multiparametric characterization of functional alterations of in vitro-neuronal network activity by different typical and atypical antipsychotics.
Aims To identify differential effects of antipsychotics on spontaneous neuronal network activity as a functional readout.
Methods Cultured networks of dissociated cortical cells of postpartal mice coupled to MEAs were exposed to increasing doses of aripiprazole, clozapine, haloperidol, olanzapine, raclopride, and risperidone.
Results We found a concentration-dependent inhibition of firing patterns for all substances except olanzapine. All other substances

https://doi.org/10.1016/j.eurpsy.2016.01.2012 Published online by Cambridge University Press

mediated a concomitant irreversible suppression of burst and spike rates, a decrease of the burst duration and the number of spikes in bursts as well as dose-dependent network desynchronization (decrease of Cohen's kappa). The comparison of the different antipsychotics with regard to their half-maximal effective dose values (EC-50) for inhibiting the spike rate yielded an increasing order of EC_{50} values, i.e. a declining order of toxic potency, of aripiprazole (8.77 μM) < clozapine (9.36 μM) < haloperidol (9.77 μM) < risperidone (15.9 μM) < raclopride (22.7 μM). No significant correlations were identified between EC_{50} values of the distinct antipsychotics and their binding affinity to the dopamine D(2), the serotonin 5-HT(1A), 5-HT(2A), 5-HT(2C), and the M(1) and M(2) muscarinic acetylcholine receptors.

Conclusion In MEAs, a dose-dependent neurotoxic effect of typical and atypical antipsychotics alike occurred at supratherapeutic doses via a yet unknown mechanism that did not involve actions on major receptor targets of these compounds.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2012

EV1028

Increased libido as a buproion-SR side effect: Clinical description of a case

L. Gallardo Borge*, C. Noval Canga, L. Rodíguez Andrés, I. Sevillano Benito, M. Hernández García, A. Álvarez Astorga, R. Hernández Antón, S. Gómez Sánchez, G. Isidro García, P. Marqués Cabezas
Hospital Clínico Universitario, Servicio de Psiquiatría, Valladolid, Spain
* *Corresponding author.*

Introduction Bupropion is a dual antidepressant, a norepinephrine and dopamine reuptake inhibitor. Its main use is in affective disorders as major depression. Antidepressants have been commonly associated with sexual side effects in the libido, sexual arousal, orgasm and erectile function. Bupropion has negative influence in sexual function, even it could increase the libido. Due to this, it could be a good option in patients with active sexual life and affective disorder.

Clinical report A 58-year-old female with a long history of depression disorder for 5 years. History of lots of side effects with different treatments, sexual dysfunction with serotonin-antidepressants. Treated with bupropion SR 150 mg/day and alprazolam, she suffered a relapse. The bupropion was increased to 300 mg/day. Three days later she appeared in the consultation room, presented a sense of pre-orgasmic of 72 hours of evolution, high increased libido, tiredness, muscle tension and insomnia. This sense did not improve after the sexual act. It had never happened previously. The side effect improved when the bupropion was reduced to 150 mg/day and disappeared with its withdrawal.

Conclusions The case made a relationship between the increased of bupropion's dose and the appearance of unusual sexual side effects (increased of libido and pre-orgasmic sense). Not only bupropion is one of the antidepressants that do not cause sexual dysfunction, if not it was reported in some trials that could be a treatment against this dysfunction due to its prosexual effects. The mechanism is unknown but could be related with norepinephrine or dopamine transmission.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2013

EV1029

Lithium treatment and thyroid dysfunction – data from an inpatient psychiatric department

M. Lázaro[1,*], A. Mota[1], A. Moreira[2], R. Alves[1], M.A. Nobre[1]
[1] *Centro Hospitalar Psiquiátrico de Lisboa, Clínica 5, Lisbon, Portugal*
[2] *Área de Pedopsiquiatria, Centro Hospitalar Lisboa Central, H.D. Estefânia, Lisboa, Portugal*
* *Corresponding author.*

Introduction Lithium is among the most effective therapies for bipolar disorder. Lithium treatment may cause hypothyroidism, goiter or to a lesser extent hyperthyroidism, since it can affect several aspects of thyroid functioning. The prevalence of lithium-associated hypothyroidism varies extensively between studies, reaching up to 47%, and affecting more females than males (5:1).

Objective Determine the prevalence of thyroid dysfunction in an acute inpatient psychiatric department dedicated to affective disorders and its association with lithium therapy.

Aims To review the relation between lithium treatment and thyroid dysfunction.

Methods Observational, descriptive and retrospective study with clinical and laboratorial data concerning all inpatient episodes of 2015 in our Psychiatric Department. A non-systematic literature search was performed in PubMed.

Results The present study documented a high prevalence of thyroid dysfunction, particularly in women. Most cases were due to either hypothyroidism or subclinical hypothyroidism. Patients treated with lithium were more often under thyroid hormone replacement therapy (levothyroxine).

Conclusions The evidence that lithium treatment is associated with hypothyroidism is well established and this condition is easily treatable with levothyroxine. This study highlights the importance of baseline screening of thyroid function and regular long-term monitoring in patients treated with lithium.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.2014

EV1031

Metabolic syndrome and its association with psychotropic medications in psychiatric patients from CAISM–IGSS (Center for Comprehensive Care Mental Health/Guatemalan Institute of Social Security)

J. Lopez
Guatemala

Introduction The use of antipsychotics represents an integral part of the psychiatric practice, unfortunately the use seems to be associated with an elevated frequency of metabolic alterations causing an important weight disorder and glucose and lipid homeostasis, diminishing life expectations for these patients, likely to develop metabolic syndrome without proper control.

Objectives This study intended to find the association between metabolic syndrome in patients with psychotropic treatments used in the Guatemalan Institute of Social Security (IGSS).

Methodology Cohort Study ($n = 43$ patients) who were treated combined with antipsychotics and mood stabilizers or antidepressants, conducting checkups at the beginning, then two to four months after, evaluating diagnosis of metabolic syndrome according to the criteria stated by the International Diabetes Federation (IDF).