

**Methods:** Retrospective study of prescription charts of 14 patients representing the most recent who have been prescribed clozapine as in-patients. Data would be compared against the titration doses recommended by the British National Formulary and by the manufacturers (Novartis).

**Results:** 5/14 patients were admitted solely for clozapine initiation. 1/14 did not tolerate it after 5 days. 2/14 patients were re-started clozapine following a period of discontinuation and their discharge dose was achieved faster than initial titration as recommended. 9/14 patients' titration was slower than recommended by the guidelines with a minimum difference of 113 days if using the slower recommended titration or a maximum of 208 days if using the faster one. None of the patients' titration appeared to be slowed down due to the presence of emerging side-effects.

**Conclusions:** Prescribing practice appears to lengthen hospital admissions due to delays in changing doses. This was less relevant for patients admitted exclusively for clozapine initiation. The development of a policy for community initiation and the development of a pre-printed up-titration chart for clozapine are potential solutions to minimise bed occupancy therefore improving both patients' experiences and bed management.

## P0252

Similar subjective response and adherence rates for long-acting risperidone and conventional depots

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**Background and Aims:** Amongst oral antipsychotics, tolerance and adherence are thought to be higher with atypicals versus conventional agents. Fewer data exist for parenteral antipsychotics regarding the atypical–conventional comparison.

**Aim:** to compare adherence rates and subjective response between long-acting risperidone (LAR) and conventional depots.

**Methods:** Cross-sectional, naturalistic, one-site study of all outpatients with severe mental disorders treated with injectable antipsychotics over a 12-month period at one Spanish mental health unit. Different sets of broadly- and narrowly-defined criteria for adherence were calculated from mental health nurses registry data. Patients' subjective response was self-assessed with the Subjective Well-being under Neuroleptic treatment (SWN) and the Drug Attitude Inventory (DAI-10).

**Results:** Subjects treated with LAR (n=27) and conventional depots (n=22) were similar in clinical and demographic terms. Both groups reported mostly positive subjective responses with the SWN (LAR=71.8+18.4 vs depots=81.7+15.3) and the DAI-10 (LAR=3.0+4.8 vs depots=4.0+4.5), with non-significant differences. Regardless the criteria of adherence used, rates of non-adherent subjects were also comparable, ranging from 36% (narrowly-defined) to 82% (broadly-defined). Although mean telephone prompts were higher for the LAR group (p=0.002), this difference disappeared when interval of administration (14 vs 28 days) was taken into account (ANCOVA: F=0.76; p=0.4).

**Conclusions:** In this small study, atypicality would not influence attitudes or subjective response to parenteral antipsychotics. Furthermore, the two-fold administration frequency of long-acting risperidone compared to depots does not seem to lead to higher rates of non-compliance amongst outpatients with severe mental disorders.

## P0253

Risk factors for partial adherence to parenteral antipsychotics in outpatients with severe mental disorders

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**Background and Aims:** Effectiveness of parenteral antipsychotics (PAP) to prevent relapses in persons with severe mental disorders (SMD) is limited by adherence. However, data about potential risk factors for non- or partial compliance with PAP are relatively scarce and inconsistent.

**Aim:** to determine variables associated with partial compliance in a naturalistic one-site study.

**Methods:** The sample comprised all outpatients with SMD treated with PAP over a 12-month period at one mental health unit in Spain. Different sets of broadly- and narrowly-defined criteria for adherence were calculated from mental health nurses registry data. Retrospective chart review yielded sociodemographic (age, gender, educational level, civil and vocational status) and clinical (ICD-10 diagnosis, age of onset, illness duration, number of admissions, past/current substance abuse disorders, and community treatment order) variables.

**Results:** Forty-nine patients were identified; most were single (83%), received a government pension (73%) and lived with their family (67%). When the strictest criteria for adherence were used, illness duration was positively associated with a > 4 day-delay in PAP injection (r=0.36; p=0.01). Furthermore, patients under community treatment orders ( $\chi^2=7.5$ ; p=0.006) and those with past substance abuse ( $\chi^2=8.9$ ; p=0.003) showed higher rates of non-compliance. This latter variable was the only predictor of non-compliance (exp. $\beta=0.15$ ; IC 95%=0.04–0.6; p=0.007) and correctly classified 80% of the sample ( $\chi^2=8.3$ ; R<sup>2</sup>=0.23; p=0.004).

**Conclusions:** Confirming previous results, substance abuse may lead to a poorer compliance with parenteral antipsychotics. Conversely, demographic variables would play a less relevant role in adherence to PAP.

## P0254

Prediction of response in 160 patients with schizophrenia, schizoaffective and bipolar disorder after olanzapine or risperidone treatment

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**Background:** There is extensive evidence that clozapine and olanzapine produce the largest increase in weight or BMI among the atypical antipsychotic drugs. There is also considerable, if controversial

evidence, that clozapine-induced weight gain is predictive of clinical response in patients with schizophrenia.

**Objectives:** The aim of this study was to determine if weight gain and changes in metabolic measures with olanzapine and risperidone also predict clinical response in patients with schizophrenia, schizoaffective disorder, or bipolar disorder.

**Methods:** Data from a 12 month, randomized, prospective study of the effects of olanzapine and risperidone in 160 patients with schizophrenia (SCH) and schizoaffective disorder (SAD), and bipolar disorder (BPD) on weight gain, BMI increase and metabolic measures including fasting blood glucose, hemoglobin A1c, total cholesterol, triglycerides, HDL, triglycerides/HDL ratio, log triglycerides, LDL to predict improvement in PANSS total scores.

**Results:** Weight gain and increase in BMI predicted the clinical response to olanzapine, but not risperidone, in patients with SCH or SAD, but not BPD, at 1, 3 and 6 months, when used in combination with other psychotropic medications or no concomitant mood stabilizers. Changes in lipid and glucose measures did not predict response to either drug.

**Conclusions:** Olanzapine-induced weight and BMI increase predicted decrease in PANSS total score at 1, 3, 6 months. No such relationship was found for risperidone-treated patients in either diagnostic group. These results suggest weight gain and clinical response to olanzapine and clozapine may be based on similar mechanism which differentiates them from risperidone.

## P0255

Effect of risperidone-induced hyperprolactinemia on bone mineral density in youth

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**Background and Aims:** Hyperprolactinemia can inhibit sex steroids, resulting in bone loss. We, thus, set out to evaluate the effect of risperidone-induced hyperprolactinemia on bone mineral density in youth.

**Methods:** Children and adolescent males treated with risperidone for a minimum of six months underwent volumetric bone mineral density (vBMD) measurement using peripheral quantitative computerized tomography of the ultra-distal nondominant radius. Their treatment history was reviewed and their prolactin and testosterone serum levels measured.

**Results:** We recruited 73 males (mean age: 12.1yrs [SD=2.9], mean Tanner stage: 2.6 [SD=1.4]) treated with 0.03mg/kg (SD=0.02) of risperidone per day for an average of 3.1yrs (SD=1.9). Hyperprolactinemia (defined as a prolactin level > 18.4ng/ml) was present in 51% of the sample. After controlling for Tanner stage which was strongly associated with serum testosterone, we found a trend for a negative effect of prolactin on testosterone. As expected, ultra-distal radius cross-sectional area and cortical vBMD, but not trabecular vBMD, increased with pubertal development. After adjusting for prolactin and pubertal stage, in the subgroup of peri/pubertal (i.e. Tanner stage ≥ 2) participants with hyperprolactinemia, prolactin was negatively associated with trabecular, but not cortical, vBMD.

**Conclusion:** To our knowledge, our data are the first to describe the negative effect of risperidone-induced hyperprolactinemia on bone mineral density following long-term treatment in youth.

## P0256

Aripiprazole in schizophrenic patients

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We worked with a group of 36 patients diagnosed with schizophrenia (DSM-IV-TR) who were in a chronic condition, with a predominance of negative and depressive-amotivational symptomatology. They were on a long-term therapy with antipsychotic agents, achieving just a light improvement on the symptoms.

We switched to aripiprazole using a daily dosage of 15-30 mg. We evaluated the results on PANSS and ICG scales at the beginning of the treatment and after the first and third month, whilst paying special attention to the side-effects and adverse reactions that occurred. Concomitantly, we used benzodiazepines and hypnotics during the first two weeks, and antiparkinsonism agents were not needed.

From an average initial PANSS score of 74 and ICG score of 3.6, after a month, PANSS average score lowered to 60 and ICG's came down to 3. After 3 months, PANSS average score was 45 and ICG's was 2.5.

There was no need for discontinuing the treatment in 35 of the patients. One patient discontinued treatment and follow-up. Side-effects were Invaluable in general, though at the start insomnia and light jitteriness were observed in some of the patients.

We believe that aripiprazole is a very useful antipsychotic drug, not only for controlling acute episodes, but also on chronic patients for its effectiveness and good tolerability.

## P0257

Effects of antipsychotics on aggression during acute hospitalization

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Aggression is a transnosographical dimension in psychiatric patients. The aim of the present study was to explore the aggressive dimension in acute hospitalised patients, with regard to the pharmacotherapeutic approach.

351 patients were consecutively admitted to a psychiatric ward during a 12 months period. Aggressive behaviours were analysed using the MOAS scale, at admission (T0) and at discharge (T1), after 12.4 ± 8.8 days. General psychopathology was assessed via BPRS, at T0 and T1.

Aggressive behaviours occurred in 8.9% of the cases during the hospitalization. Male gender, compulsory admission status, comorbid substance abuse, a recent history of aggressive behaviours were significantly associated with an increased risk of committing aggressive acts (p<0.05). Antipsychotics were the most frequently prescribed medications (76.6% of the cases). The effects of each antipsychotic medication on the amelioration in MOAS score and BPRS score were presented in Fig. 1a and 1b respectively. Percent of amelioration in BPRS score was significantly correlated with amelioration in MOAS score (r=0.35, p<0.0001).

The results evidenced small but significant differences among antipsychotic drugs regarding the efficacy on aggressive dimension.