1.32±1.29 kg/m^2 and AG/GG genotype group had mean BMI change of 1.38±0.95 kg/m^2. (p = 0.84) Analyzing 40 subjects who took only risperidone, at 4 weeks, AA genotype group had mean BMI change of 1.00±1.01 kg/m^2 and AG/GG genotype group had mean BMI change of 0.79±0.76 kg/m^2 (p = 0.71) and at 8 weeks, AA genotype group had mean BMI change of 1.39±1.22 kg/m^2 and AG/GG genotype group had mean BMI change of 1.22±1.08 kg/m^2. (p = 0.66) Thus, we did not find the association between the –2548 A/G polymorphism of leptin gene and antipsychotic drug-induced weight gain.

Conclusion: Our data do not support the involvement of the –2548 A/G polymorphism of leptin gene in antipsychotic drug-induced weight gain. Small number of subjects with GG genotype and short period of follow up may be limitation of our study. Further studies with long-term follow up are warranted.

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P.3.c.044 Plasma antioxidant status in first psychotic episode patients before and after antipsychotic treatment

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Purpose of the study: There is strong evidence that reactive oxygen species play an important role in several pathological and neurodegenerative conditions of the central nervous system. The antioxidant defence plays a critical role in protecting cells from damage by oxidative stress. It has been suggested that decreased antioxidants, besides an increase in dopamine levels, may lead to neurodegeneration (Grima et al., 2003). Both, a decrease in antioxidant defence (Yao et al., 2006) and an alteration in dopamine metabolism, have been reported in the pathophysiology of schizophrenia. The aim of the study was to determine the levels of the antioxidants in plasma of patients with a first psychotic episode, compared with matched healthy control subjects, and the effect of treatments on these antioxidant levels.

Method: This is a prospective and longitudinal study in consecutively admitted patients with a first psychotic episode. First psychotic episode is defined as the first time patient displayed positive psychotic symptoms of delusions or hallucinations. This study aims to follow-up 100 patients for one year. Patients are treated with antipsychotics (no clozapine). The preliminary data presented have been obtained form blood samples taken upon arrival into the emergency room (n = 82) and after four weeks (n = 44), six month (n = 22) and one year (n = 19) of follow-up. The patients were diagnosed as follows: schizophrenia (n = 20), bipolar disorder or psychotic depression (n = 22), schizophreniform disorder (n = 10), other psychosis (n = 26) and toxic psychosis (n = 4). In addition, samples were taken from healthy volunteers that were matched for sex and age (n = 57). Blood samples were processed following standard procedures and total antioxidant status was determined by a spectrophotometric assay in serum. The data were analyzed by T-test for un-paired samples (patients versus controls) and paired samples (four weeks, six months and one year versus admission).

Results: These preliminary results reported a decrease (p < 0.05) in total antioxidant status of patients at baseline (1.045±0.034 mM) versus control (1.199±0.033 microM). After the four weeks following-up total antioxidant status of patients (1.095±0.042 mM) was similar to basal level (1.096±0.095 mM). However patients that have completed the six months (n = 22) and one year follow-up (n = 19), had levels of antioxidants significantly higher than levels at admission (1.262±0.094 vs 1.009±0.057 and 1.193±0.082 vs 0.921±0.059, respectively). Women with fist psychotic episode (n = 27) had lower levels of antioxidants than men (n = 55) at admission, although it did not reach statistical significance (p = 0.058). Control women and men had similar antioxidant levels.

Discussion: These preliminary results show that a decrease in antioxidant defence may be involved in the pathophysiology of psychosis. These levels were similar to control group after six months of treatment. Thus, chronic antipsychotic treatment seems to play a role in this improvement. This finding may have a significant impact on improving strategies directed to neuroprotection in the treatment of psychosis. The ongoing study would provide final data when all the patients complete the 1 year follow-up, providing more extensive data of the effect of long term antipsychotic administration.

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P.3.c.045 Treatment of agitation caused by severe mental illness: data from the South London and Maudsley intensive care units trial evaluation (SLAMICUTE) study

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Data to inform the emergency treatment of agitated psychotic patients who cannot give consent is sparse. Here we report the preliminary data from a naturalistic observational study of the management and outcome of acute incidents in the setting of four UK Psychiatric Intensive Care Units, (PICUs). Our aim is to gather evidence to inform best practice and guide future