**Aims:** To assess the effects of clozapine, olanzapine and haloperidol on cholesterol triglycerides and glucose levels in aggressive schizophrenic patients. To determine whether changes in cholesterol are related to aggression.

**Methods:** 100 physically aggressive schizophrenics were assigned to a randomized, double-blinded, parallel-group, 12-week treatment. There were 33, 34, and 33 subjects in the clozapine, olanzapine, and haloperidol groups, respectively. Fasting cholesterol, triglycerides and glucose were collected at baseline and at end of study. All aggressive events were recorded.

Results: 95 patients provided blood samples. There were differences among the three medications in weight change (F=7.6, df=2,93; p<.001), with greater weight gain for clozapine and olanzapine than haloperidol. There were significant differences among the 3 groups in changes in cholesterol (F=4.5, df=2,93; p=.01; greater increase for clozapine than for haloperidol, p <.01), triglycerides (F=5.5, df=2,93; p<.01; greater increase in clozapine than haloperidol, p <.01 and olanzapine p=.01) and glucose (F=3.9, df=2,93; p=.02; greater increase for clozapine than for haloperidol, p <.01 and than olanzapine, p=.05). We investigated the relationship to aggression, by dividing patients into high and low cholesterol groups through a median split. Patients in the low cholesterol group were more physically aggressive during the study than those in the high group (F=4.94, df=2,92, p=.03). A significantly higher percentage of the patients in the haloperidol group than in the clozapine group had values below the median.

**Conclusions:** Clozapine treatment is associated with increases in serum glucose, triglycerides and cholesterol. This increase in cholesterol may explain in part its antiaggressive effect.

## P0275

Tardive dystonia in neuroleptic treated bipolar disorder and treated with clozapine - a case report and review of the literature

Y. Kwan, K. Sim. Department of General Psychiatry, Institute of Mental Health, Woodbridge Hospital, Singapore, Singapore

Tardive dystonia is an extrapyramidal adverse effect that can arise after prolonged use of dopamine receptor antagonists and is characterized by sustained involuntary muscle contractions frequently causing twisting and repetitive movements or abnormal postures. This occurs most commonly in the head and neck region and can begin as a focal dystonia, which then progresses to a segmental form. The prevalence of tardive dystonia in neuroleptic treated individuals ranges from 0.4% to 4%. Up to half of the patients who develop tardive dystonia tend to do so in the first 5 years of neuroleptic exposure, with onset earlier in males than females. Tardive dystonia tends to be persistent with a low remission rate of 10 percent in 6.6 years. Previous cases of tardive dystonia were mainly reported in patients with schizophrenia spectrum disorders. We report a case of tardive dystonia in a neuroleptic treated bipolar disorder and was treated with clozapine.

Tardive dystonia has been associated with both typical and atypical neuroleptic exposure, such as clozapine, olanzapine, risperidone and ziprasidone. Several authors have suggested the use of clozapine in the treatment of tardive dystonia. The ability of clozapine to treat tardive dystonia may be related to D1 receptor antagonism. There have also been case reports of tardive dystonia treated by olanzapine and quetiapine. Botulinum toxin and dopamine-depleting drugs may also be effective. More recent reports suggested the use of deep brain stimulation of regions such as globus pallidus and subthalamic nucleus in the treatment of tardive dystonia.

## P0276

Remission in patients with schizophrenia treated with risperidone long-acting injection: Results from the e-STAR project in Czech Republic and Slovakia

J. Pečeňák <sup>1</sup>, I. Tůma <sup>2</sup>, M. Povey <sup>3</sup>, A. Lam <sup>4</sup>. <sup>1</sup> FNsP Bratislava, Bratislava, Slovakia <sup>2</sup> FN Hradec Kralove, Hradec Kralove, Czech Republic <sup>3</sup> SGS Life Science Services, Wavre, Belgium <sup>4</sup> Johnson and Johnson Pharmaceutical Services, Toronto, ON, Canada

**Objective:** Assess illness remission in patients with schizophrenia enrolled in the electronic-Schizophrenia Treatment Adherence Registry (e-STAR) in Czech Republic and Slovakia.

Methods: e-STAR is a secure web-based, ongoing, international, long-term observational study of patients with schizophrenia who initiate RLAI during routine clinical management. Data is collected retrospectively (1 year) and prospectively (2 years). Prospectively patients are evaluated for the following symptoms: delusions, conceptual disorganization, hallucinatory behaviour, mannerisms and posturing, unusual thought content, blunted affect, passive/apathetic social withdrawal, and lack of spontaneity and flow of conversation. Patients in whom all of these symptoms are absent, minimal or mild and within normal boundaries, stable, and do not interfere with thinking, social relations, and behaviour or functioning, were considered to be in cross-sectional remission and if this persisted for at least 6 months, they were considered to be in remission.

**Results:** 1,068 patients have been enrolled into e-STAR in Czech Republic and Slovakia; 280 patients have been followed for at least 12-months and were included. The majority were male (57.9%) with a diagnosis of schizophrenia or schizoaffective disorder (85.7%, 14.3%) respectively) with a mean age of  $37\pm12.1$  years and a mean time since diagnosis of  $9.2\pm9$  years. The proportion of patients who met the criteria for cross-sectional remission increased from 2.4% at baseline to 37.9% at 12 months. After 12-months, 20.6% of patients met the criteria for illness remission.

**Conclusions:** Based on 12-month interim results, the proportion of patients who met the criteria for illness remission increased after initiating RLAI.

## P0277

Improvements in illness severity and functioning in patients with schizophrenia treated with risperidone long-acting injection in The Netherlands

M. van Kooten <sup>1</sup>, H. Bij de Weg <sup>2</sup>, E. de Groot-Stam <sup>3</sup>, C.L. Mulder <sup>4</sup>, M. Povey <sup>5</sup>, M. Manders <sup>6</sup>, A. Lam <sup>7</sup>, Z. Zhao <sup>7</sup>. <sup>1</sup> Ambulant ACT, de Geestgronden-Buitenamstel, Hoofddorp, The Netherlands <sup>2</sup> GGZ Friesland, Leeuwarden, The Netherlands <sup>3</sup> Gelderse Roos, RIAGG, Veenendaal, The Netherlands <sup>4</sup> BAVO Europoort, Westersingel 93, Rotterdam, The Netherlands <sup>5</sup> SGS Life Science Services, Wavre, Belgium <sup>6</sup> Janssen-Cilag, Tilburg, The Netherlands <sup>7</sup> Johnson & Johnson Pharmaceutical Services, Raritan, NJ, USA

**Objectives:** To assess changes in illness severity (Clinical Global Impression-Severity scale, CGI-S) and functioning (Global Assessment of Functioning, GAF) in patients initiated on risperidone long-acting injection (RLAI) during routine clinical practice and followed up for at least 12 months in the Netherlands.

**Methods:** e-STAR is an international, prospective, observational study of patients with schizophrenia who have been initiated with RLAI. Data are collected both retrospectively (1 year) and