

## CS04-01

### DO ANTIPSYCHOTICS MODIFY AGE AND WEIGHT AS RISK FACTORS FOR DIABETES MELLITUS?

D. Cohen<sup>1</sup>, H. Burger<sup>2</sup>, C. Gispen de Wied<sup>3</sup>, R. Stolk<sup>1</sup>, D. Grobbee<sup>4</sup>

<sup>1</sup>*Clinical Epidemiology, University of Groningen*, <sup>2</sup>*Interdisciplinary Center for Psychiatric Epidemiology, University Medical Center Groningen, University of Groningen, Groningen*, <sup>3</sup>*Medicines Evaluation Board/CBG, The Hague*, <sup>4</sup>*Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Centrum voor Gezondheidswetenschappen en Eerstelijngeneeskunde, Utrecht, The Netherlands*

**Aims:** Study of risk factors of diabetes mellitus from the general population in a schizophrenic population.

**Method:** Measurement of glucose and insuline levels, fasting and 120' after oral glucose tolerance test (OGTT) and calculating of HOMA-IR and HOMA-B.

**Results:** We studied 167 outpatients, mean age 40.2 years, 90.9% Caucasian, suffering from schizophrenia (83%) or schizoaffective disorder (17%).

Age could not be confirmed as a risk factor on any of the glucose or insuline measurements or HOMA in patients with typical or atypical antipsychotics.

With bodyweight, patients with typical differed from those with atypical antipsychotics. Weight was not a risk factor on any measurement or model in with typical antipsychotics. In patients with atypical, a significant correlation with levels of plasma glucose ( $p=0.017$ ), insuline ( $p= 0.003$  resp.  $p= 0.010$ ) or glucose homeostasis models ( $p= 0.004$  resp.  $p= 0.016$ ). Fasting plasma glucose (FPG) was the notable exception ( $p=0.987$ ).

**Conclusion:** Diabetes risk factors age and weight behave differently in schizophrenia or schizoaffective disorder.

The finding that age was not a risk factor, suggests that age is not a suitable criterion for the decision of glucose screening in this population.

The different effect of weight (a risk factor only in patients treated with atypical, but not with typical antipsychotics) suggests in different pathophysiological pathway.

As FPG was the only measurement with no correlation with either risk factors, this suggests that FPG is insufficiently sensitive for detection of disturbed glucosemetabolism in schizophrenia. Additional measurements (fasting insuline, HOMA-IR, HOMA-B, OGTT) seem to be necessary.