

P01-211

SELECTIVE EFFECT OF PATERNAL AGE ON AGE-OF-ONSET IN BIPOLAR I DISORDER

M. Grigoriu-Serbanescu<sup>1</sup>, P.J. Wickramaratne<sup>2</sup>, R.C. Elston<sup>3</sup>

<sup>1</sup>Psychiatric Genetics Research Unit, Alexandru Obregia Psychiatric Hospital, Bucharest, Romania, <sup>2</sup>Department of Psychiatry, Columbia University, New York, NY, <sup>3</sup>Department of Genetic Epidemiology, Case Western Reserve University, Cleveland, OH, USA

Objective: The study investigated the effect of the parental age on the age-of-onset (AO) in bipolar I disorder (BPI) in connection with proband gender and family history for major psychoses in a directly interviewed sample of 530 BPI probands.

Method: All 530 probands, 73.0% of their first-degree and 22.62% of their second-degree relatives were administered the DIGS and FIGS interviews. The family history (FH) method was used for unavailable relatives. The impact of parental age on proband early/late AO was evaluated through logistic regressions. The commingling analysis (SAGEv6.1-software) was used to determine the cut-off age separating the early/late AO.

Results: We evidenced a significant influence of the paternal age  $\geq 35$  years on AO in BPI disorder in the total sample ( $p=0.023$ ) and in some subgroups defined by positive/negative FH for major psychoses: the sporadic group ( $p=0.035$ ) and the group with FH of recurrent unipolar major depression (Mdd-RUP) ( $p=0.041$ ). No effect of the paternal/maternal age on disease AO was found in patients with FH of bipolar/schizoaffective disorders/schizophrenia (BP/SA/SCZ). The global significant effect of the advancing paternal age on the decreasing proband AO was generated by female patients ( $p=0.022$ ). No effect of the paternal/maternal age on disease AO was found in male patients. Paternal age was older in fathers of sporadic cases and of cases with FH of Mdd-RUP than in cases with FH of BP/SA/SCZ ( $p=0.011$ ).

Conclusion: We evidenced a selective effect of the advancing paternal age on bipolar onset depending on offspring gender and type of FH for major psychoses.