mental instability to which the developing CNS might have been exposed.

The aim of the present study was to verify whether cognitive disturbances in schizophrenic patients are associated with FA.

**Method:** 57 schizophrenic patients (according to DSM-IV criteria) were administered a battery of neuropsychological tests. These tests were: the Wisconsin Card Sorting Test, Continuous Performance Test and the Trail Making Test.

Dermatoglyphic analysis was conducted blind to the neuropsychological results in all the cases. FA was evaluated by taking the absolute difference of the a-b ridge count between right and left hands.

**Results:** Correlation between FA and the neurocognitive variables used in the present study were calculated. High scores of FA were associated with poorer neurocognitive performance although our results do not reach statistical significance.

**Conclusion:** These results suggest the interest to explore the prenatal origin of the cognitive impairment in bigger samples.

**Acknowledgements:** This study was supported by The Theodore and Vada Stanley Foundation.

---

**S24.03**

**CAN THE DERMATOGLYPHIC EVIDENCE BE VALIDATED BY MRI IMAGES?**

J. van Os

No abstract was available at the time of printing.

---

**S24.04**

**ASSOCIATIONS BETWEEN DYSMORPHIC FEATURES, DERMATOGLYPHICS AND LATERALISATION IN PSYCHOSIS**

A. Lane, J. Reilly, O. McTigue, P. Fearon, M. Byrne, C. Larkin, E. O'Callaghan*

*Stanley Foundation Research Unit, St John of God Services, Stillorgan, Co Dublin, UK

Dysmorphic features, dermatoglyphic abnormalities and atypical lateralisation reflect developmental disturbance and have been shown to occur to excess in schizophrenia. We examine the interaction between these indices of neurodevelopmental disturbance in a sample of individuals experiencing their first episode of psychosis (schizophrenia and aﬀective), a sample with a longer duration of treated illness and matched controls. Findings indicate greater developmental instability in schizophrenia with increased rates of dysmorphic features, lower a-b ridge counts, increased rates of fluctuating asymmetry and atypical handedness. These findings suggest that individuals with schizophrenia may be less able to withstand the usual and often low-grade insults and stresses associated with development.

---

**S24.05**

**ASSOCIATION BETWEEN CEREBRAL STRUCTURAL ABNORMALITIES AND DERMATOGLYPHIC RIDGE COUNTS IN SCHIZOPHRENIA**


*Maastricht University, Maastricht, The Netherlands

Dermatoglyphic ridge counts i) reflect ontogenetic processes during the second trimester of pregnancy, and ii) can be influenced by some of the factors that also affect cerebral development. Therefore, the demonstration of an association between dermatoglyphic and cerebral structural measures in patients with schizophrenia would give credence to the view that the structural brain abnormalities associated with this disorder have their origins early in development. Twenty-eight male subjects with schizophrenia and 19 male controls underwent MRI scanning and dermatoglyphic analysis. The pattern of associations between ab-ridge count and 9 MRI features was dissimilar in cases and controls for 2 measures. Associations between dermatoglyphic features on the one hand, and frontal CSF ($r = 0.54, P = 0.004$) and fourth ventricular volume ($r = 0.38, P = 0.05$) on the other, were larger in the cases than in the controls (test for interaction $P = 0.06$ and $P = 0.08$ respectively). These findings, while in need of replication, support the view that the cerebral structural abnormalities seen in patients with schizophrenia are the result of an early pathological process impacting on the development of foetal ectodermal structures.