

Poster presentation

## Relations between pre- and perinatal aggressions and early neurodevelopmental disorders

Vintan Mihaela Adela\* and Benga Ileana

Address: Clinic of Pediatric Neurology, Romania

\* Corresponding author

from International Society on Brain and Behaviour: 2nd International Congress on Brain and Behaviour  
Thessaloniki, Greece. 17–20 November 2005

Published: 28 February 2006

*Annals of General Psychiatry* 2006, **5**(Suppl 1):S174 doi:10.1186/1744-859X-5-S1-S174

### Background

Our life, since intrauterine period, is a complex and permanent process of adaptation to internal and external stimuli. Multiple aggressive factors acting during prenatal and perinatal period and can disturb normal development of the brain, some of them could be determined by stress. Structural cerebral disorders present in hypoxic-ischemic aggressions can be similar with those described in early stress.

The objectives of the study are to make relations between pre-perinatal aggressions and early neurodevelopment disorders (0–3 years).

### Materials and methods

In a period of two years we evaluated all the infants admitted in Clinic of Pediatric Neurology Cluj-Napoca for psycho-motor retardation. The evaluation was complex clinical and paraclinical, the psychomotor development was evaluated with multifunctional test Munchen.

### Results

There were 200 infants, boys dominated (56%). We identified motor retardation — 68 infants (34%), psychic retardation — 10 infants (5%), global retardation — 122 infants (61%). On history and documents we identified aggressions (psychological, infectious, hypoxic-ischemic) — prenatal — 11 infants (5.5%), perinatal — 89 (44.5%), pre-perinatal — 23 (11.5%).

### Discussion

Intrauterine hypoxic aggression, even in the first months of pregnancy was related with mild motor retardation. Associated hypoxic aggression pre-perinatal was related with more complex neurological disorders with global

retardation or was revealed subagent pathology — genetic or metabolic.

Prematurity was related with mild motor retardation, when was associated with perinatal hypoxic-ischemic aggression, it was identified more severe neurological disorders and global retardation.

### Conclusion

1. Our study confirm other studies results that prematurity by itself do not determine brain damage. 2. The moment of birth is essential — it can revealed masked defects or can even "stressed" the brain with impact in neuropsychological development.