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Conclusions: The stable union, the higher economic status and the greater education of parents seems to be the factors most associated with good opportunities presents in the home environment at this age.

# PP-17.13 Early neonatal death due to intracranial haemorrhage: can it be predicted?

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Objective: Approximately three million early neonatal deaths occur annually worldwide, mostly in low-income countries. The most frequent causes are: infections, prematurity and associated conditions, congenital anomalies, birth asphyxia and very low birthweight due to intrauterine growth retardation or prematurity. Many score systems for prediction of neonatal morbidity and mortality use intracranial hemorrhage as indicator because of its high predicting value. Aims of this study are: to present a simple system for prediction of early neonatal death due to intracranial hemorrhage applicable in general hospital; to carry out information which could be base for further programs for improvement of newborn health on local secondary level. Methods: In this retrospective study, data were collected

from medical documentation within the Department of obstetrics and Department of neonatology in Prilep General Hospital.

Results: 50 out of 7956 live born newborns died during the early neonatal period. Twelve per cent of them had intracranial hemorrhage. We estimated relative risk of 54.54  $(\chi^2=276.97)$  for the intracranial hemorrhage as a risk factor for the early neonatal death.

Conclusions: We identified the intracranial hemorrhage as a risk factor for early neonatal death which increase the risk 54.54 times. Emphasized attention should be target on interventions which reduce preventable risk factors for early neonatal morbidity and mortality. Identification of the risk factors for early neonatal mortality makes possible the establishment of the preventive programs on local secondary level health care facilities for improving neonatal health.

## PP-17.17

Evaluation of lymphocyte subgroups in children with Down Syndrome

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Objective: Children with Down syndrome (DS) have an increased susceptibility to infections and autoimmune disorders. In this study, lymphocyte subgroups including blood CD3, CD4, CD8, CD4/CD8, CD19 and CD16.56 values were analyzed in children with DS. Our aim is to determine whether there was any difference for lymphocyte subgroups between children with DS and healthy children.

Methods: The study includes 85 children with DS, followed at Yüzüncü Yil University, Faculty of Medicine, Department of Pediatrics between December 2004 and May 2008 and 64 healthy age matched control subjects. Blood CD3, CD4, CD8, CD4/CD8, CD19, and CD16.56 values were examined in the study and control groups.

Results: A total of 85 children [48 girls (56%) and 37 boys (44%)], aged 1 month to 131 months (mean 20.91 ± 26.92mo) with DS and 64 healthy children [40 girls (65%) and 24 boys (35%)], aged 1-96 months (mean 23.11 ± 23.40mo) were included in the study. When compared with the control group, significantly decreased blood CD3, CD4, CD19 values were found in the study group (p<0.05). However, there was not any significant difference in CD8, CD4/CD8 and CD16.56 values between the control and study groups (p>0.05).

Conclusions: In conclusion, we would like to emphasize that blood CD3, CD4 and CD19 levels were found to be decreased in children with DS. Based on these finding, we think that these decreased lymphocyte subgroups might be responsible for increased susceptibility to infections in children with DS.