HZ (II-6: 3.04 vs 2.55pg/ml, $p=0.003$; MIP-2: 23.99 vs 11.19, $p=0.007$).

Summary: Our data suggest that lung mechanics and inflammation in HZ are not affected a priori. However, ventilation or oxygen exposure resulted in a phenotypical difference between genotypes.

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A SPECIFIED TYPE OF APGAR - RESULTS OF THE INTERNATIONAL TEST-APGAR STUDY

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Background: There is considerable variation in assigning Apgar scores. Definitions are required to apply Apgar score under clinical conditions such as preterm delivery or resuscitation [Rüdiger et al. ActaPaed'09:98;1433-36]. American Academy of Pediatrics suggested an additional form for resuscitated infants [Ped'06:117;1444-47], however, its predictive value was not tested until now.

Aim: Test the prognostic value of a specified Apgar score and the AAP-suggestion to predict short term neonatal outcome of preterm infants.

Methods: Comparison of the conventional Apgar with the specified Apgar score and AAP-suggestion in an international prospective study. Inclusion criteria: gestational age below 33 weeks, born within participating centres. Following data were obtained: perinatal characteristics; the infant's condition during first 10 minutes; discharge data on mortality and morbidity.

Results: Of the 2169 infants that were screened, 1930 were included with the following birth characteristics: GA 28 ± 2.5 , birthweight 1164 ± 400 g, umbilical artery pH 7.3 ± 0.1 . The specified Apgar score was significantly higher than the conventional score. Mortality of included infants was 11%. Comparison of infants who died or survived showed no differences in conventional Apgar score [median (range) 7(5-8) vs. 8(7-9)], however, significant differences in the specified score [6(4-7) vs. 9(8-10)]. 6% of infants did not require any support (according to AAP-form) during the first 10 minutes, infants who did not survive the neonatal period required significantly more support during the first 10 minutes.

Discussion: It is the first presentation of the TEST-APGAR study-results providing data to improve the usage of Apgar-Score in infants requiring support in the delivery room.

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ISOLATED OPTIC NEURITIS IN INFANCY AS A PREDICTOR OF MS?

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Optic neuritis [ON] is generally identified as the most frequent potential risk factor associated with future development of multiple sclerosis [ms]. Whereas coherency in case of the adult disease is proved, findings concerning ms after childhood ON could not be demonstrated so far. The aim of this study consists of the identification of risk factors predicting later ms.

After a mean follow-up period of 18 years, 42 patients with ON in infancy participated on a standardized study including ophthalmologic, neurologic, electrophysiological and radiological examination.

6 out of 42 [14,3%] patients show radiological definite signs of ms, 10 out of 42 [23,8%] suspect and 26 out of 42 [61,9%] feature no evidence of ms. Subgroup analysis based on radiological data shows that male gender, early onset of ON, additional neurologic symptoms, positive lesions in mri and neurologic dysfunction in coordination in clinical follow-up significantly raise the risk of future ms. In contrary, female gender, severe lost of visual acuity combined with fundusoscopic findings [prominence >1dpt, hyperaemia] cause risk reduction of later ms.

In conclusion, ON in childhood is rare in comparison to ON in adulthood. Therapy with cortisone has a positive effect on progress of ON and minimizes the risk of later ms. Therefore treatment with cortisone is strongly indicated and recommended by proven diagnosis of ON.