Results: Admission levels of S100B and NSE differed according to diagnosis and illness severity ($P < 0.0001$). IIT did not affect the time course of these markers. Patients experiencing hypoglycemia during intensive care had higher S100B and NSE from admission onwards than those without hypoglycemia. In the nested case-control study, both markers decreased after hypoglycemia ($P = 0.001$ and $P = 0.009$), unlike in the “controls” on matched days.

Conclusions: IIT in PICU did not evoke neurological damage detectable by circulating S100B and NSE, despite increased incidence of hypoglycemia. Elevated markers in patients with hypoglycemia were not caused by hypoglycemia itself, but rather reflect an increased risk of hypoglycemia in the most severely ill. This risk is difficult to capture by the classical illness severity scores.

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PREDICTING DEATH DESPITE THERAPEUTIC HYPOTHERMIA IN INFANTS WITH HYPOXIC-ISCHEMIC ENCEPHALOPATHY (HIE)

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To avoid offering false hope to parents it is important to identify potentially untreatable cases of HIE for whom cooling may not be of benefit. **Objective:** To determine pre-cooling attributes that could predict death in infants with HIE despite cooling.

Methods: 85 infants of ≥ 36 weeks' gestation who received cooling for HIE were reviewed. Logistic regression analysis was performed using pre-cooling clinical/ laboratory variables with HIE related death during first 9 months of life as primary outcome.

Results: Thirteen (15%) of 85 infants with HIE died during 9-18 months follow up despite cooling. In all, 27 of 85 infants were asystolic at birth but only 12 of these infants had Apgar of zero at both 5 and 10 minutes. Univariate analysis identified Apgar of zero at 5 minutes and at 10 minutes, $\text{pH} < 6.7$, base deficit > 22 mmol/L, and absent spontaneous movement as being significant but on multivariate analysis, only Apgar score of zero at 10 minutes ($p < 0.001$, OR 51.7, 95% CI 9.9 - 269.5) remained significantly associated with primary outcome. Of 12 infants who were asystolic at and beyond 10 minutes of life, 9

died from HIE, 2 had spastic quadriplegia at 18-24 months, and one had extensive encephalomalacia on brain MRI.

Conclusions: Among all pre-cooling variables, only 10 minute Apgar score is independently associated with death despite cooling. Furthermore, infants who remain asystolic at 10 minutes and beyond are unlikely to survive despite cooling, and the rare survivor is likely to survive with severe disability.

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EARLY DIAGNOSIS OF POSTOPERATIVE COMPLICATIONS AFTER LIVER TRANSPLANTS IN CHILDREN

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Introduction: The UMCG is the only medical centre in the Netherlands that has performed liver transplants on children since 1982. In the last few years a lot has improved in the treatment thereof.

At this current moment approximately 15 children are being transplanted each year. The survival rate has improved by 50%.

During these admissions pitfalls may occur that can lead to postoperative complications!

Aim: To give insight on the means used to recognize post operative complications in early stages in children after liver transplants.

Methods: Protocols have been developed in which post operative parameters concerning monitoring, blood results and radiology imaging have been described. Nurse observation and interpretation parameters are of further essential significance. These are mainly directed towards prevention of infections, timely detubation, and keeping up with the fluid balance and temperature of the patient. Adjacent to that, the in research phase TEG-study, offers important information about the coagulation.

Results: Working according to protocol makes it possible to perceive and intercept complications in early stages. Moreover we aim at thrombosis, infections and liver failure. In pediatric care parents are indissolubly attached to their child. This makes