Bayley Scales of Infant Development, third edition (BSID-III). Adverse outcome was defined as cognitive score<85, language score<79 and motor score<85.
Results: Sixteen full-term neonates with HIE were treated with moderate hypothermia. Three patients died. Among the survival, 8 and 6 patients completed BSID-III at 6 and 12 months of age respectively. Serum S100B protein level was declined with HT. Serum S100B protein level at 72 hours of HT was 178±342 (15-1430). Patients with S100B protein level higher than 200l at 72 hours of HT were at risk for poor cognitive development at 6 months of age (p=0.038).
Conclusions: Serum S100B protein level higher than 200pg/ml at 72 hours of HT is associated with poor cognitive development at 6 months of age.

27 Efficacy of Intravenous Immunoglobulin (IVIG) for ABO Hemolytic Disease of Newborn Mata-analysis
免疫球蛋白治療新生兒ABO溶血性疾病的療效整合分析

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Background: To assess the effectiveness of intravenous immunoglobulin (IVIG) in reducing the need for exchange transfusion, duration of phototherapy and hospital stay in neonates with proven haemolytic disease due to ABO hemolytic disease of newborn (HDN) by meta-analysis.
Methods: Two authors independently obtained data from published articles. We identified randomised and quasi-randomised controlled trials of infants with proven ABO HDN reporting on at least one of the following outcomes: number of exchange transfusions, length of phototherapy, or length of hospital stay. The interventions under investigation were IVIG with phototherapy or phototherapy alone. Systematic review of randomised and quasi-randomised controlled trials comparing IVIG and phototherapy with phototherapy alone in neonates with ABO HDN.
Results: Literature search from year of 1992 to 2012, there were eight randomized controlled trials identified as meeting the criteria for inclusion in the meta-analysis. Significantly fewer infants required exchange transfusion in the IVIG group odds ratio was 0.28 (95% confidence interval (CI) 0.11 to 0.26); number needed to treat 2.6 (95% CI 2.0 to 3.8). Also hospital stay and duration of phototherapy were significantly reduced.
Conclusions: Intravenous immunoglobulin plus phototherapy seems more effective than phototherapy alone at reducing the proportion of ABOHDN infants with exchange transfusion and the average number of transfusions per infant, reducing the duration of phototherapy and is more effective than phototherapy alone at reducing maximum serum bilirubin levels. However, none of the studies included in the systematic review were of high quality.

28 Ginsenoside-Rg1 Improves Cell Survival and VEGF Production in Vascular Endothelial Cells under Hyperoxia
人參皂苷Rg1促進高氧下血管內皮細胞之存活與VEGF之生成

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Background: Oxygen supplement is necessary in the treatment of many diseases, especially in preterm infants with respiratory distress. But oxygen overload may induce injury or other diseases. For the past decades, several diseases in preterm infants, such as bronchopulmonary dysplasia, retinopathy of prematurity, were known to be correlated with hyperoxia. Vascular endothelial cell is one of the major targets of hyperoxic injury. Hyperoxia increases cell apoptosis and suppresses cell functions, such as angiogenesis and vascular endothelial growth factor production. Rg1, the key component in Ginseng, has been demonstrated to promote the function of cultured vascular endothelial cell in proliferation, angiogenesis, and protein production in previous researches.
Methods: HUVECs were cultured under 21% and 60% oxygen concentration. for 24, 48, and 72 hours. Various concentrations of ginsenoside Rg1 were administrated in the culture medium. Cell numbers were counted every 24 hours and VEGF concentrations were also evaluated by Western blot.
Results: The Western blot results of VEGF and GR production were both corrected with actin concentration of the cells. The VEGF/actin result of control was presented as standard. The VEGF/actin results of cells cultured under control, 60% O_2 with 0nM, 150nM, and 300nM Rg1 after 24 hours experiment were 1.00±0,05, 0.81±0.22, 0.97±0.21, 1.28±0.35. The results after 48 hours experiments were 1.00 ±0,04, 0.76±0.13, 0.82±0.13, 0.96±0.20. The results after 72