Background and aims Infants with severe hyperbilirubinaemia can develop kernicterus and have significant adverse outcomes. A previous study in this hospital showed a significant number of infants presenting with an initial serum bilirubin (SBR) above exchange transfusion level. Since that study the Bhutani Nomogram has been introduced. Our main aim was to see if the introduction of this Nomogram helped to reduce presentations with severe hyperbilirubinaemia.

Methods We looked at initial SBRs taken in infants ≥36 weeks gestation and ≥2.5 kgs birth weight born in 2012. We excluded infants of mothers with known antibodies as these infants may have had cord blood tested for direct Coombs status (DCT). We looked at infants whose DCT status was not known.

Results We compared our results to those obtained in the previous study from 2007/2008.

Abstract PO-0464 Table 1

<table>
<thead>
<tr>
<th></th>
<th>2007/2008</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>All infants ≥36 weeks ≥2.5 kgs</td>
<td>15851</td>
<td>8288</td>
</tr>
<tr>
<td>Number of infants with at least 1 SBR</td>
<td>1644</td>
<td>1001</td>
</tr>
<tr>
<td>Max SBR (μmol/L)</td>
<td>673</td>
<td>349</td>
</tr>
<tr>
<td>Mean SBR (μmol/L)</td>
<td>209</td>
<td>173</td>
</tr>
<tr>
<td>p ≤ 0.001</td>
<td>65.4</td>
<td>57.1</td>
</tr>
<tr>
<td>Infants above exchange transfusion</td>
<td>14 (0.85%)</td>
<td>0</td>
</tr>
</tbody>
</table>

There has been a significant reduction in infants reaching exchange transfusion level with no infant above this level in 2012.

Conclusions The Bhutani Nomogram is an effective tool in helping to reduce cases of severe hyperbilirubinaemia.

The original study performed by Bhutani et al, to develop this Nomogram excluded DCT positive infants. This study shows that this Nomogram is effective in a population where the DCT status is not known.

PO-0465

REGIONAL CEREBRAL TISSUE OXYGEN SATURATION DURING NEONATAL TRANSITION: IS THERE AN INFLUENCE OF GENDER?

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Background Placental transfusion at birth either facilitated by DCC or MC has been described to reduce intraventricular haemorrhage and donor blood transfusion in preterm infants. Few studies have reported on neurodevelopmental outcomes.

Aims To assess neurodevelopmental outcome of ex-preterm survivors (<33 weeks gestation) enrolled into our randomised trial of DCC (30 seconds) versus 4 times MC (Rabe Obstet and Gynecol 2011) at 3.5 years corrected age with Bayley-III examination.

Methods Prospective cohort study. Results were analysed by a statistician blinded to the group allocation using ANCOVA (significance level at the. 05 alpha).

Results Bayley-III assessments were obtained in 29/51 survivors (56%). The MC group (9 male, 9 female) performed better on language (115 SD18 vs 105 SD23), cognitive (127 SD20 vs 120 SD27) and motor (113 SD23 vs 108 SD21) subscales than the DCC group (5 male, 6 female), which did not reach statistical significance.

PO-0466

3.5 YEAR NEURODEVELOPMENTAL OUTCOME OF PRETERM INFANTS RANDOMISED TO DELAYED CORD CLAMPING (DCC) OR MILKING OF THE CORD (MC)

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