Method A total of 50 mothers who have hospitalized infants in NICU, included in this study and the social support they perceived, and the their anxiety and depression levels were analyzed using “Multidimensional Scale of Perceived Social Support Scale” and Hospital Anxiety and Depression Scale (HAD scale), respectively.

Results Perceptions of total social support and the social support provided by friends in the mothers increased as the infants’ birth weight decreased; the levels of total perceived social support and the perceived social support from families and spouses in the mothers getting pregnant with assisted conception techniques (ACT) were greater, compared with the mothers of spontaneous conception. The scores of total perceived social support and the perceived social support from families and spouses in depressed mothers were found to be lower than those in otherwise healthy mothers.

Conclusion It was concluded in our study that the mothers of the hospitalized infants in the neonatal intensive care unit required social support provided especially by the spouses and the families, disclosing the relationship of inadequate perception of such supports with development of depression.

1765 DO WE REALLY NEED TO REQUEST THAT BLOOD INVESTIGATION?

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Blood investigations form an important aspect of patient management. Rationalisation of every test requested is needed to ensure optimum use of available resources. Wide variation in estimates of inappropriate laboratory use (4.5–95%) has been reported in literature. Hospitalisation beyond 7 days, complex cases, level of staff training, lack of awareness of costs are factors contributing to laboratory over utilisation.

We assessed our blood investigation ordering practices in order to evaluate unnecessary investigations and clinical variance. We aimed to develop a standard framework for ordering investigations in preterm babies.

This retrospective study (Jan-June 2010) evaluated blood investigations requested in first 14 days of life on the all the babies born <30 weeks gestation and admitted to our neonatal unit. These data amounted to ~5% of bed days on the unit over the study period. We created a standard investigation model for preterm babies and compared the findings with the standard.

37 babies were included in the study with total 479 cot days which represent 4.8% of unit cot days per year. We observed that we were requesting nearly 40% more tests as compared to standard. We estimated potential savings of £1000 GBP for only 4.8% of total cot days every year in our unit.

Following audit was presented in our departmental meeting for the education of junior members of the staff and to raise the awareness of the costs of investigations and the need to reduce unnecessary testing. We recommended colour coding of pathology forms according to cost.

1766 RANDOMISED CONTROLLED TRIAL OF POLYETHYLENE BAG AND EXOTHERMIC MATTRESS VERSUS POLYETHYLENE BAG ALONE FOR THERMOREGULATION IN PRETERM INFANTS AT BIRTH

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Aims To determine whether placing very preterm infants in polyethylene bags (PB) and on exothermic mattresses (EM) in the delivery room (DR) results in more infants with temperatures of 36.5–37.5°C on NICU admission.

Methods Infants < 31 weeks’ were randomised to treatment with or without EM in DR. All infants were placed in PB under radiant heaters and were transferred to the NICU in transport incubators. Infants’ rectal temperature was measured on admission. We estimated we would need to recruit 118 infants.

Results The external data safety monitoring committee recommended stopping recruitment after analyzing data from 59 infants due to a significant difference in primary outcome between the groups. We present data for 72 infants enrolled when this recommendation was made. Fewer infants randomised to EM had temperatures within the target range [41% vs 77%, p=0.002] and more had admission temperature >37.5°C [46% vs 17%, p=0.009].

Conclusions In newborn very preterm infants, using EM in addition to PB in the DR resulted in more infants with temperatures outside normal range and more hyperthermia on admission to NICU.

1767 VALIDATION OF THE DUTCH 60 MONTHS AGES AND STAGES QUESTIONNAIRE (ASQ)

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Introduction The Ages and Stages Questionnaire (ASQ) is currently the most widely used parent-completed developmental screener. Psychometric properties of the Dutch ASQ 60-months version (Dutch ASQ-60) have not yet been assessed.
Aim To assess the psychometric properties of the Dutch ASQ-60.

Material and Methods Parents of 426 term-born and 1111 pre-term-born children from the prospective cohort study Lollipop filled in the Dutch ASQ-60 and a general questionnaire on educational problems, when the children were 57–63 months old. Dutch cut-off values, reliability and validity (content, construct and concurrent) of the Dutch ASQ-60 were determined for both the original ASQ score (at least 1 abnormal ASQ Domain-score) and the ASQ-Total score. Furthermore mean domain scores of the Dutch ASQ-60 were compared with versions in other languages.

Results There were no problems with content validity in an expert meeting. Cronbach’s alpha, as measure for reliability was 0.86 for the ASQ-total score. Male gender, prematurity, low paternal education, low family income and small-for-gestational-age (SGA) were associated with abnormal ASQ scores, confirming construct validity. Concurrent validity at age 5 for special educational needs was good for both the original ASQ score (sensitivity 80% and specificity 94%) and the ASQ-Total score (sensitivity 65% and specificity 94%). Area under the curve (AUC) for the ASQ-Total score was 0.86. Mean ASQ-scores for the Dutch ASQ-60 differed only slightly from other countries: Cohen’s delta was above 0.5 for 3 out of 15 comparisons.

Conclusion The Dutch ASQ-60 has good psychometric properties to screen for developmental problems at age 5 years.

1769 HOME-BASED TRANSCUTANEOUS ELECTRICAL STIMULATION (TES) TO TREAT CHILDREN WITH SLOW-TRANSIT CONSTIPATION (STC): SAFE (SATISFACTION, FEASIBILITY & EFFICACY) STUDY

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Background /aims: Home-based transcutaneous electrical stimulation (TES) is a novel therapy for children with slow-transit constipation (STC). TES has evolved from a clinic-based to home-based treatment. We aimed to assess the end-users’ responses and views to TES.

Methods TES was self-administered via adhesive electrodes on the abdomen and back (quadrupolar stimulation), 60 mins/day for 6 months. Forty STC children/families were assessed by questionnaires (Ethics 30116A) for: rating of the treatment; time consumption; daily routine disruption; feasibility of delivery; symptom improvement, laxatives used; willingness to recommend TES to others and their views on the current device.

Results Thirty-six/40 STC children/families responded (20 males, ages: 3–18 yrs, mean:9 yrs). Symptom improvement developed in 69% (17% in < 3 months, 53% 3–6 months and 19% >6 months). Forty-seven percent of children reduced laxative use with 19% unchanged and 33% unsure about the effect. Seventy-five percent were satisfied with treatment, 97% would recommend TES to other children with chronic constipation and 67% would purchase a machine for booster treatment if required. All families found the instructions of home TES clear and useful. Problems with use included pad adhesiveness (61%), wire connections (11%) or both (11%). All felt home TES was safe and most had minor disruptions to family routines (parents 6% vs child 28%).

Conclusions This study confirms that home-based TES was safe and well accepted by STC children/families with symptom improvement in 2/3 of these children. There were difficulties with existing device that may be overcome by training.

### Abstract 1768 Table 1

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Control (Medical; n=29, 15 female; age 3–17yrs; mean 8.7yrs)</th>
<th>Home-based TES (n=45, 22 female; age 3–16yrs; mean 7.6yrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre (mean±SD)</td>
<td>Post (mean±SD)</td>
</tr>
<tr>
<td>1 1/2 (mins)</td>
<td>45±26</td>
<td>49±19</td>
</tr>
<tr>
<td>Geometric centre 6hr</td>
<td>1.8±0.3</td>
<td>1.8±0.3</td>
</tr>
<tr>
<td>Geometric centre 24hr</td>
<td>2.8±0.4</td>
<td>2.7±0.6</td>
</tr>
<tr>
<td>Geometric centre 30hr</td>
<td>3.2±0.7</td>
<td>3.1±0.6</td>
</tr>
<tr>
<td>Geometric centre 48hr</td>
<td>3.8±0.8</td>
<td>3.7±0.7</td>
</tr>
<tr>
<td>Gastrointestinal transit index</td>
<td>11.5±1.9</td>
<td>11.0±1.7</td>
</tr>
</tbody>
</table>