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?

doi:10.1136/archdischild-2012-302724.1765

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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 4.3% 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 4.3 % 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

doi:10.1136/archdischild-2012-302724.1766

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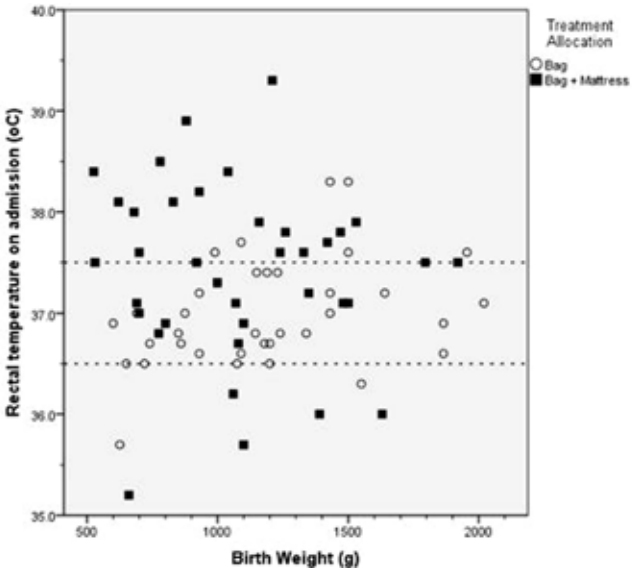
Aims To determine whether placing very preterm infants in polyethylene bags(PB) and on exothermic mattresses(EM) in the delivery room(DR) results in more infants with temperatures of 36.5–37.5°C on NICU admission.

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% v 77%, p=0.002] and more had admission temperature >37.5C [46% v 17%, p=0.009].



Abstract 1766 Figure 1

Abstract 1766 Table 1 Results

[Data are *mean (SD) or #n (%)]	BAG & MATTRESS (N=37)	BAG (N=35)	P value
Gestational age (wks)*	28(2)	28(2)	0.584
Birth weight(g)*	1085(360)	1194(386)	0.222
Adm rectal temp 36.5–37.5(C)#	15(41)	27(77)	0.002
Adm rectal temp(C)*	37.4(0.9)	37.0(0.5)	0.017
Adm rectal temp>37.5C#	17(46)	6(17)	0.009
Adm rectal temp<36.5C#	5(14)	2(6)	0.264

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)

doi:10.1136/archdischild-2012-302724.1767

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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 preterm-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 78%) 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.

1768 NUCLEAR TRANSIT SCINTIGRAPHY (NTS) PROVIDES OBJECTIVE ASSESSMENT OF GASTROINTESTINAL TRANSIT IN CHILDREN WITH SLOW-TRANSIT CONSTIPATION (STC)

doi:10.1136/archdischild-2012-302724.1768

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Background /aims: Children with slow-transit constipation (STC) are resistant to medical treatment. We used a new treatment - transcutaneous electrical stimulation (TES) to treat STC children since 2005, with improved symptoms in most children. Home-based TES was available in 2008. We aimed to assess gastrointestinal transit (GIT) in STC children after medical treatment and home-based TES, with nuclear transit scintigraphy (NTS) as an objective assessment. We hypothesized that TES may alter gastrointestinal transit but not medical treatment in STC children.
Methods All STC children were diagnosed by NTS. STC children treated medically ("Control", n=29 - from NTS database) were compared with 45 STC children treated with home-based TES (1-hour dailyx6 months from 2009–2011). Gastrointestinal transit measured gastric emptying (t½) and colonic transit by geometric centre (GC) at 6, 24, 30 & 48 hours. The effects of treatments were measured by a repeat NTS. Pre- and post-treatment NTS data were analysed with paired t-test; $p<0.05$ considered significant. Symptoms assessments were based on bowel diary recorded. Ethics approval obtained (HREC30059A&30116A).
Results Control group has no improvement in symptoms with most STC children treated with home-based TES has improved symptoms. GC and GIT significantly improved in STC children treated with home-based TES (Table 1).
Conclusions We found symptoms and gastrointestinal transit improved in STC children with home-based TES but not with medical treatment. NTS provides objective assessment, which is important to confirm clinical status after treatments and helps to decide on further interventions.

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

doi:10.1136/archdischild-2012-302724.1769

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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 therapy. 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 (quadripolar 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, 33% 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 rated the treatment good, while 17% were unsure about this new treatment. Ninety-seven percent 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

Parameters	Control (Medical; n=29, 15 female; age 3–17yrs; mean 8.7yrs)			Home-based TES (n=45, 22 female; age 3–16yrs; mean 7.6yrs)		
	Pre (mean±SD)	Post (mean±SD)	p-value	Pre (mean±SD)	Post (mean±SD)	p-value
t 1/2 (mins)	45±26	49±19	0.38	42±18	36±16	0.06
Geometric centre 6hr	1.8±0.3	1.8±0.3	0.55	1.9±0.3	1.9±0.3	0.40
Geometric centre 24hr	2.8±0.4	2.7±0.6	0.31	2.6±0.4	2.8±0.5	0.003
Geometric centre 30hr	3.2±0.7	3.1±0.6	0.36	2.9±0.6	3.1±0.5	0.039
Geometric centre 48hr	3.8±0.8	3.5±0.7	0.06	3.4±0.7	3.8±0.7	0.001
Gastrointestinal transit index	11.5±1.9	11.0±1.7	0.18	10.8±1.6	11.6±1.6	0.002