neonatal central DI. Six cases were preterm with intracranial hemorrhage and the other two patients were congenital toxoplasmosis one of which was preterm. All of the cases received oral desmopressin at a dose of 10 mcg/kg/day. And then oral desmopressin dosage was adjusted according to the serum sodium and urine output. All cases were treated successfully with oral DDAVP. Three cases who have intracranial hemorrhage died due to other preterm complication. According to our case series, oral DDAVP is an applicable, safe and effective form of DDAVP.

1322 INTER-HOSPITAL TRANSPORT OF NEONATES IN THE SOUTH OF VIETNAM - RELATIONS TO PROGNOSIS AND OUTCOME

doi:10.1136/archdischild-2012-302724.1322

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Background and Aim To improve neonatal conditions in the South of Vietnam through mapping the conditions during inter-hospital transfer, revealing avoidable factors and unmasking cultural differences allowing action towards improvements.
Method A prospective and analytical cohort study was conducted at Pediatric Hospital #1 in HCM City, Vietnam. Data was collected through standardized questionnaires and during a set timeframe in a one-month period. Infants < 28 days or weighing < 2000 g, transferred from the south-half of Vietnam were included giving a total of 103 neonates representing 96 transfers.
Results A transfer > 120 min increased the risk of admission > 8 days in total (p= .027) and in NICU (p= .001). The infants most vulnerable to transfer were more frequently transferred by an ambulance equipped and escorted to handle emergency than the least vulnerable (p= .003). However, the transfers of intermediate quality (51.5%) had significantly worse outcomes (p= .007). 28.2% of the ambulances were adequately equipped to handle emergencies and none had monitoring equipment for neonates. All neonates were escorted by health personnel, though none had transport training and only 32% had appropriate qualifications. Initiated treatment was continued, but no new initiatives were taken.
Conclusion The inter-hospital transport is of good standard, all transfers being by ambulance, with medical accompaniment and some pre-assessment made. A long transfer still worsens the outcome of the neonates significantly. However, our study reveals factors, which can be improved prior to, during and following transfer. In order to succeed with new approaches, the cultural aspects must be acknowledged.

1323 IMPACT OF THE NEAR TERM INFANTS ON NICU BED UTILIZATION

doi:10.1136/archdischild-2012-302724.1323

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Background Near term infants are prone to more medical problems than full term infants requiring more neonatal intensive careunit (NICU) admissions .
Aim Study the impact of near term infants on the utilization of NICU beds.
Methods Retrospective collection of hospital newborn electronic database from January 2007 – December 2011.

Two groups *were identified group 1* infants 37 weeks and above and *group 2* near term infants 34 weeks-36+6 weeks. The following demographics collected, Birth weight (BWT), Gestational age (GA), gender, length of stay (LOS) and NICU admission.
Results The number of newborns delivered during the study period were41089. Near term infants were 3722 (9%). Mean birth weight was 3.1±0.458 kg for group 1 and 2.42±497 kg for group 2 *(p 0.0001)*. 5835 (14%)infants required NICU admissions at birth in group 1 and 1025(28%) in group 2 *(p 0.09)*. LOS was calculated a mean of 2.58±3.33 days in group 1 and 8.5±15.58 days in group 2 (p*.0001)*.

Using multiple regression analysis birth weight and male gender were predictors for prolonged hospital LOS and the need for NICU admission in both groups.
Conclusion In our population near term infants were more likely to utilize NICU beds for significantly longer LOS compared to full term which increases costs and limit availability of NICU beds in our community.

1324 CLINICAL PROFILE AND OUTCOME OF NEWBORNS WITH ACUTE KIDNEY INJURY IN A LEVEL 3 NEONATAL UNIT IN WESTERN INDIA

doi:10.1136/archdischild-2012-302724.1324

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Background and Aims Our study aims are

1. To study the clinical profile and associated conditions in newborns with Acute Kidney Injury (AKI) in our Level 3 Neonatal ICU.
2. To evaluate the incidence and outcome of newborns with AKI.
3. To study risk factors associated with AKI in our newborns.

Methods AKI was defined as Serum Creatinine >1.5mg/dl. Data about neonates admitted over period of three years were studied from a Level 3 Neonatal Intensive Care Unit in Western India. Parameters associated with AKI were evaluated and descriptive analysis was done.
Results Out of 1745 patients, 74 (Male-61, Female-13) patients had AKI. The incidence of AKI was 4.24 % of admitted newborns, and 80% of the babies developed AKI within first week. Incidence of AKI in outborn babies (5.83%) is higher than inborn babies (2.44%) and outborns comprised 72.97% of all AKIs (54/74). Mean Birth weight of neonates was 2.46±0.55 kg with 47.30% being LBWI. Factors associated with AKI were sepsis (91.9%), shock(64.9%), requirement of ventilation(62.2%), Perinatal asphyxia (36.5%), resuscitation (40.5%) and requirement of intubation at birth (23%). Mean Serum Creatinine was 2.87±1.81 mg/dl(1.51 to 10.05). Mean age at diagnosis was 5.76±6.64 days(1 to 41). The mortality was 20% and 51.6% patients went DAMA (Discharge Against Medical Advice).
Conclusions Mortality in patients with AKI is very high. Most AKI occurs in the first week of life and factors associated with AKI are easily recognizable and should prompt early referral of neonates.

1325 INTRA-SUBJECT VARIABILITY ON 3T MRI IMAGING OF NEONATAL HIPS

doi:10.1136/archdischild-2012-302724.1325

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Background MRI may have utility for examining neonatal hips. To date, MRI measurements of hip dimensions have only been characterized on post-mortem imaging. The aim of this study was to compare measurements made on left and right neonatal hips.
Methods Neonatal hips were imaged at 3T. Acetabular width and depth were measured using methods described by Whitby

(J. Ped. Ortho. J Pediatr Orthop 2007; 27:898). In addition, femoral head DWI was used to calculate apparent diffusion coefficient (ADC). For each measurement the left and right were compared using within subject coefficient of variation (WS CV).

Results 44 neonates were imaged. Median (IQR) gestational age at birth was 36 weeks (range 25–42 weeks), 13 less than 32 weeks gestation; median gestational age at scanning was 41 weeks (range 37–46). 18 babies had HIE of whom 13 were cooled. Mean (SD) and WS CV (95% CI) for the following measurements were: Femoral head ADC 1.87 (0.094) on Right, 1.87 (0.099) on Left, WS CV 2.42 (2.12–2.72); acetabular width 17.1 (1.6) on Right, 17.0 (1.6) on Left, WS CV 3.50 (3.02–3.96); acetabular depth 3.81 (0.81) on Right, 3.81 (0.81) on Left, WS CV11.6 (10.1–13.1); acetabular width: depth ratio 4.66 (1.0) on Right, 4.66 (1.1) on Left, WS CV 13.6 (11.9–15.2).

Conclusions In this diverse group of babies the variation between sides was minimal. Analysing a single hip should be sufficient in this population.

1326 COMPARISON OF INTENSIVE LIGHT-EMITTING DIODE AND INTENSIVE COMPACT FLUORESCENT PHOTOTHERAPY IN NON-HEMOLYTIC JAUNDICE

doi:10.1136/archdischild-2012-302724.1326

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In severe and rapidly increasing jaundice, the use of high-intensity phototherapy provides greater effectiveness and a faster decrement in bilirubin levels. The aim of this study is compare the effectiveness of intensive compact fluorescent tube (CFT) and intensive LED phototherapy in higher doses of irradiance.

Method Forty three infants over 35 weeks of gestation with severe severe nonhemolytic hyperbilirubinaemia were enrolled in the prospective study. All infants received multidirectional (circular shaped) high-intensity phototherapy. Of these 20 infants received CFT while 23 infants received LED phototherapy. Bilirubin levels and body temperatures were measured periodically and the rates of bilirubin decrement were calculated.

Results Mean serum bilirubin level of the 43 infants was 20.5±1.5 mg/dl at the beginning of the therapy and mean duration of phototherapy was 20.6±1.1 hours. The rate of mean bilirubin decline was 47.2% and the declination was more prominent in the first four hours. Clinical characteristics, initial bilirubin levels, rates of bilirubin decrement and the phototherapy durations were comparable for LED and CFT groups. Slightly elevated mean body temperature (37.1°C) was determined in CFT group ($p<0.05$).

Conclusion Circumferential phototherapy units are effective devices, can provide up to 50% reduction in bilirubin levels within 24 hours in infants with nonhemolytic jaundice. Since it was shown that these devices can provide rapid decrease in bilirubin levels in the first few hours, they are useful in cases with high risk of bilirubin encephalopathy and kern icterus. These units decrease the hospitalization period so can help to maintain breast feeding.

1327 AUDIT ON MANAGEMENT OF NEONATAL JAUNDICE

doi:10.1136/archdischild-2012-302724.1327

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Background Neonatal jaundice is a common medical problem in postnatal wards. With the introduction of NICE guidelines in UK, the management of jaundice of newborn infants has achieved clarity.

Aims An audit was undertaken to check if local team were adhering to the NICE guidelines on neonatal jaundice management (May 2010) and to make recommendations to improve compliance.

Methods Prospective audit was conducted between January 2011 to August 2011 and 48 newborn infants with jaundice in postnatal ward were randomly selected and included. Data was collected using proforma, baby/maternal notes and blood results on computer system.

Results Poor performance was demonstrated in identifying the risk factor for jaundice-whether baby's previous sibling had jaundice requiring treatment (15% as compared to 100% standard). There was 90% compliance with NICE guidelines (standard 100%) with regards to serum bilirubin (SBR) measured for infants with jaundice <24 hours. 83% of infants (29/35) with jaundice onset >24 hours had transcutaneous bilirubinometry(TCB) measurement which reduced the number of blood tests performed on these infants. Only 75% of the parents of infants with jaundice received information leaflets on newborn jaundice.

Conclusion

1. When used appropriately, TCB reduces need for invasive blood tests and the workload of paediatric doctors on postnatal wards. The midwives and junior doctors should receive training for TCB use and management of jaundice in accordance with NICE guidelines.
2. All parents of newborn infants with jaundice should receive NICE information leaflets on jaundice to increase awareness of the condition.

1328 ASSOCIATION BETWEEN DELAYED PASSAGE OF MECONIUM AND NEONATAL JAUNDICE IN AN UNIVERSITY HOSPITAL IN BRAZIL

doi:10.1136/archdischild-2012-302724.1328

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Background and Aims Meconium contains large amounts of bilirubin and its retention leads to increased of enterohepatic circulation contributing to neonatal hyperbilirubinemia. The objective of study is investigate the relation of delayed passage of meconium and neonatal jaundice.

Methods This is a cross sectional study realized between August 2011 and March 2012, in rooming-in newborns at Universidade Luterana do Brasil Hospital. All the babies born at term, without hemolytic disease, no fetal anomalies, apgar greater than 7 in the fifth minute and breastfeeding only. The serum bilirubin levels (TBLs) were obtained by the apparatus Dräger Jaundice Meter JM-103®. The transcutaneous bilirubin variable was stratified according to the Bhutani nomogram. Were mensured TBLs between 24 and 59 hours of life. The protocol was approved by the institutional review board, and the parents' written consent was obtained.

Results Groups were similar regarding demographics and clinical characteristics. Among the 670 infants studied 118(17.9%) have meconium amniotic fluid (MAF). The TBLs were lower in neonates with higher gestational age ($p<0.001$), MAF ($p=0.007$) and weight loss less than 7.5% at discharge ($p=0.001$). The TBLs, in neonates at ≥37 hours of life, were lower in the MAF group when compared with the group not MAF ($p=0.023$). There is no significant association with the classification by Bhutani nomogram and the number of evacuations at discharge (p=0,051).

Conclusions The presence of MAF showed lower TBLs. Babies with weight loss ≥7.5% have higher probability to have greater TBLs. Futher studies are needed for definite results.

1329 COMPARISON OF TRANSCUTANEOUS BILIRUBINOMETER WITH SERUM BILIRUBIN IN NEONATES

doi:10.1136/archdischild-2012-302724.1329

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