Preterm infants weighing less than 1500 g routinely undergo a series of eye examinations to screen for retinopathy of prematurity (ROP). Mydriatic eye drops used for pupil dilatation while these examinations may be absorbed by nasopharyngeal mucosa and gastrointestinal system that may cause neurological and gastrointestinal side effects rarely. We aimed to evaluate the effect of mydriatic eye drops on cerebral and mesenteric tissue oxygenation by near infrared spectroscopy (NIRS), in very low birth weight (VLBW) infants.

Eleven preterm infants with a gestational age of <32 weeks and/or birth weight <1500g were included the study. Infants with intracranial hemorrhage (grade II), PDA, major congenital anomalies, major heart disease, infection, anemia, thyroid disease, acidosis, history of perinatal asphyxia and surgery, not feeding orally, were excluded the study. Cerebral and mesenteric tissue oxygenation were measured by NIRS probes that located forehead and umbilical region before and after the mydriatic eye drops. Eleven (6 female, 5 male) infants were included the study.

The median gestational age, birth weight, postnatal age and body weight during examination were 29 weeks, 1190g, 39 days and 1700g, respectively. Before the mydriatic eye drops mean cerebral and mesenteric rSO2 were 63.0±6.5 and 55.1±0.1, respectively. After the eye drops mean cerebral and mesenteric SO2 were 60.0±7.6 and 54.9±10.1, respectively. Therefore the difference may reach statistically significant levels in large study population.
Conclusion The improvement of these indicators is attributed to the improvement the conditions of woman; following, screening and the taken in charge of the high risk pregnancies. As well as the improvement of the taken in charge of the newborns in work-room.

1304 NEWBORN LOW BIRTH WEIGHT: MOROCCAN DATA
doi:10.1136/archdischild-2012-302724.1304

A Barkat, M Banouar. Equipe de Recherche en Santé et Nutrition du Couple Mère Enfant, Faculté de Médecine et de Pharmacie de Rabat, Université Souissi; Faculté de Médecine et de Pharmacie de Rabat; Université Souissi, Rabat, Morocco

Objective The overall objective of this work is to describe the prevalence of newborns with low birth weight in Rabat Souissi Maternity Hospital in 2010. The specific objective is to compare the population of preterm and small for gestational age, assess their immediate future and identify the causes.

Methods The study took place at Rabat Souissi Maternity Hospital between January 1st 2010 and December 2010. Were enrolled, all newborns weighing <2500 g. The main variables collected were gestational age, sex, route of extraction, Apgar at 5 min, the maternal age, parity, maternal disease history and immediate future of the newborn.

Results Of 14,608 live births registered during 2010, 1475 newborns had a birth weight less than 2500g or 9.96% of which 722 were small for gestational age, 728 were premature infants. Vaginal delivery was predominant in both populations. The average age of mothers was (28.2±6.83 vs 28.6±6.60) years (p = 0.89). The main etiologies encountered were the maternal genitourinary infections for prematurity (25.6%) while the main cause of low birth weight were gestational hypertension (11.7). As for becoming immediate mortality was about 11% in premature infants against 2% in small for gestational age. (p<0.001). Hospital transfers were in the range of 46.2%. The main indications were respiratory distress, infection, and perinatal asphyxia.

1305 FULL TERM NEONATAL ADMISSIONS IN A REFERRAL HOSPITAL
doi:10.1136/archdischild-2012-302724.1305

BR Qandalji. Pediatrics, Ministry of Health, Amman, Jordan

Background and Aim Full term neonates represent a significant proportion of neonatal admissions. The aim of this study was to see the characteristics of this group in the largest neonatal unit in the capital and how these could be reduced to decrease the burden on the neonatal unit.

Patients and Methods All full term neonatal admissions to the neonatal unit in Al-Bashir hospital, 1/1/2011-30/6/2011 were included. A special questionnaire was filled which included the various characters of the group, sex distribution, birth weight, reason for admission, duration in hospitalisation and outcome.

Results During this period a total of 855 FTNN were admitted representing 47.6% of total admissions, 80% were admitted on day one, 60% were normal vaginal delivery. 90% were in born, respiratory distress was the main cause of admission, 32%, IUGR14.7%, NN11.6%, IODM8%, ASPHYXIA 7%,50% were hospitalised for 1–3 days, mortality rate was 5%,62% of which were due to asphyxia, 30% were due to congenital malformations.

Conclusion FTNN represent a significant proportion of admissions the main reason for admission is respiratory distress, and the main reason for mortality is asphyxia, 50% are hospitalised for 3 or less days. a good nursery with intermediate care would decrease the load on the neonatal unit.

1306 PREDUCTAL TRANSCUTANEOUS OXYGEN SATURATION AT BIRTH AFTER ELECTIVE CAESAREAN SECTION
doi:10.1136/archdischild-2012-302724.1306


Background The 2010 Neonatal Resuscitation Guidelines recommend preductal transcutaneous oxygen saturation (SpO2) monitoring at birth in preterm and/or non reactive and/or hypotonic newborns. Previous studies have assessed SpO2 showing that SpO2 immediately after birth is higher in newborns by Vaginal Delivery (VD) vs. Caesarean Section (CS). This difference has never been investigated in newborns by Emergency CS (presence of labour) vs. Elective CS (absence of labour).

Objective To compare SpO2 in newborns by Emergency CS vs. Elective CS in the first minutes of life.

Methods The study included healthy newborns at term by Emergency CS, by Elective CS and by VD as control group. Infants receiving supplemental O2 or assisted ventilation were excluded. SpO2 was recorded for the first 10 minutes of life using a Masimo Radical-7 pulse oximeter probe (Masimo, Irvine, CA) applied to the right hand.

Results We studied 24 newborns by Emergency CS, 57 by Elective CS and 47 by VD. The SpO2 gradually improved during the first 10 minutes of life in all groups (p per trend <0.0001). The SpO2 were similar in the tenth minute of life in all the 3 groups, but it was always higher in newborns by Emergency CS as well as by VD than in those by Elective CS from minute one to minute nine (p<0.05).

Conclusions SpO2 in newborns by Emergency CS in the first minutes of life is higher than that born by Elective CS as well as in newborns by VD vs. Elective CS.

1307 HIDDEN TOXICITY IN THE NICU: PHTHALATE EXPOSURE OF VERY LOW BIRTH WEIGHT INFANTS
doi:10.1136/archdischild-2012-302724.1307

A Demirel, A Coban, S Yildirim, E Bicici Dogan, R Sanci, ZE Ince. Pediatrics, Division of Neonatology, Istanbul University Istanbul Medical Faculty, Istanbul, Turkey

Aim To determine the exposure of VLBW infants to phthalates during their stay in the neonatal intensive care unit.

Method Preterm infants (<32wks and/or <1500g), who stayed in the NICU >2 wks and had at least one invasive procedure were included. Urine samples were collected in the first 3 days and every 2 weeks until discharge. Phthalate contents of the medical devices, urinary excretion of phthalate metabolites. (diethylhexylphthalate-DEHP, monoethoxylphthalate-MEHHP, monoethoxyhexylphthalate-MEOHP, monooctylhydroxyethylphthalate-MEHHP) and their relation to exposure intensity, gestational age, birth-weight and postnatal age were analysed.

Result Mean gestational age and birth weight of the patients (n=96) were 28.9±1.5wks and 1024±262g. DEHP was detected in umbilical catheters, intubation tubes, nasogastric tubes and nasal cannulas. Nasal cannulas had the highest content (201.7mg/0.5g). MEHHP was the most frequently detected metabolite (81.4%) in the urine samples (n=151) and its levels increased during the first 4 weeks (mean concentration: 519.5 ng/ml), were higher in patients who had continuing need of invasive procedures after 2 wks (255.32 ng/ml vs 65.85 ng/ml), were significantly higher in the first urine samples of patients <1000g compared to those ≥1000g (63.17±5.79 ng/ml vs 10.98±2.28 ng/ml, p=0.001).

Conclusion Phthalate metabolites could be detected in the urine samples of preterm infants very early after admission to the NICU. The levels were higher in the first weeks of intensive care when exposure intensity was highest and in babies <1000g. Monoethylhexylhydroxyethylphthalate-MEHHP may be the most suitable biomarker of phthalate exposure.


doi:10.1136/archdischild-2012-302724.1304

doi:10.1136/archdischild-2012-302724.1305

doi:10.1136/archdischild-2012-302724.1306

doi:10.1136/archdischild-2012-302724.1307
1303 Evolution of Neonatal Mortality in the Neonatal Department - in Kouba Hospital - Algiers
S Alhallak and A Elhasane

Arch Dis Child 2012 97: A371-A372
doi: 10.1136/archdischild-2012-302724.1303

Updated information and services can be found at:
http://adc.bmj.com/content/97/Suppl_2/A371.4

These include:

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/