

## Abstracts

**G316(P) SCREENING FOR NEONATAL HYPOGLYCAEMIA, A SINGLE CENTRE EXPERIENCE**

Z Abusalah; Neonatal Intensive Care Unit, Mediclinic City Hospital, Dubai, United Arab Emirates

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**Background** Significant Neonatal Hypoglycaemia (NH) is considered as a major risk for neuro-developmental problems. Over the years, several guidelines have been issued in an attempt to minimise these potentially harmful sequelae<sup>1,2,3,4</sup>. This is the first audit/survey of the screening of neonatal hypoglycaemia in our region.

**Aims** To determine the adherence to guidelines on the screening of NH on the Postnatal Ward. Furthermore, this aimed at establishing the optimum frequency and number of Blood Glucose (BG) recordings that are required to detect hypoglycaemia at the pre-set high risk group of babies.

**Method** The records of all babies born at our hospital from 1 August 2011 till the end of February 2012 were retrospectively reviewed. Babies who qualify for NH screening are the Infants of Diabetic Mothers (IDMs), babies with Low Birth weight < 2500 g, babies who were > 4000 g at birth and late preterm babies (35–37 completed weeks of gestation).

Babies at risk of hypoglycaemia are offered the first feed within 30–60 min after birth. BG was checked before the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> feeds. When three consecutive blood glucose levels were  $\geq 2.6$  mmol/l, the BG is checked before alternate feeds for further 3 readings.

**Results** 1099 babies were born over the study period. As an example the total number of IDMs was 59 babies (5.3%). 113 babies were late preterms (10.2%).

None of the babies at risk of hypoglycaemia has missed monitoring.

In these high risk babies, the lowest BG was detected during the first 12 h of monitoring. It was 1.3 mmol/l.

During the 6 hly pre feed BG checks (after three consecutive 3 hly readings), the lowest BG was 2.4 mmol/l. These recordings were managed successfully by feeding and re-checking pre next feed.

**Conclusions** The procedure for screening for NH on postnatal ward was followed. Low BS was mainly detected in the first 12 h of monitoring. The subsequent monitoring did not show significantly low BS irrespective of the category. Based on these results, one may safely consider shortening the period required for screening. Larger scale studies will still be required to resolve this issue<sup>5</sup>.

**G317(P) USE OF CLINICAL AUDIT TO IMPROVE NEONATAL THERMOREGULATION AT A UNIVERSITY HOSPITAL IN ETHIOPIA**

FA Hutchings; Department of Paediatric Respiratory Medicine, Bristol Royal Hospital for Children, Bristol, UK

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**Aims**

1. To use the audit cycle to assess and improve the standard of neonatal thermoregulatory care.
2. To demonstrate the usefulness of clinical audit in a resource-limited setting.

**Methods** A prospective audit was undertaken on the Neonatal Unit at a University Hospital in Ethiopia. During a two week period in October 2012, the temperature of each baby on the

daily ward round was recorded using a standard thermometer. Thermoregulatory care was assessed against two standards based on World Health Organisation guidance. These were a) all babies should have an axillary temperature between 36 and 37°C and b) all babies should wear a hat.

Following presentation of the audit to the paediatric department, strategies for improving neonatal thermoregulation were agreed and implemented. These included publication of a thermoregulation guideline, new observation charts, staff training, repair of equipment and provision of individual thermometers for nurses. A second audit was undertaken six months after the first.

**Results** Sixteen babies (45 temperature measurements) were included in the first audit and 19 babies (62 temperature measurements) in the second audit. The number of axillary temperatures in the target range (36–37°C) increased from 19/45 (42%) in the first audit to 37/62 (60%) in the second audit. The number of hypothermic babies (temperature less than 36°C) decreased from 22/45 (49%) in the first audit to 14/62 (23%) in the second audit. Hat wearing increased from 22/45 (49%) in the first audit to 36/62 (58%) in the second audit.

**Conclusions** Whilst there has been good progress in reducing under-five child mortality in Ethiopia, neonatal mortality rates have essentially remained static over recent years. Interventions to reduce rates of neonatal hypothermia have been shown to lead to significant reductions in mortality in low and middle-income countries. Very high rates of neonatal hypothermia were observed during this study but simple, low-cost measures improved thermoregulatory care.

This study has demonstrated the successful implementation of the clinical audit cycle in a resource-limited environment. Undergraduate and postgraduate medical curricula in all settings should include training in the use of clinical governance tools such as audit.

**British Academy of Childhood Disability: British Paediatric Neurology Association****G318 EXPERIENCES OF TRANSITION FROM PAEDIATRIC TO ADULT SERVICES FOR YOUNG PEOPLE WITH STURGE-WEBER SYNDROME (SWS)**<sup>1,2</sup> Newsom-Davis, <sup>1</sup>N Keren, <sup>1,2</sup>SE Aylett; <sup>1</sup>Neurosciences Department, Great Ormond Street Hospital NHS Trust, London, UK; <sup>2</sup>Neurosciences Unit, The University College London Institute of Child Health, London, UK

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**Background:** Sturge-Weber syndrome (SWS) is a rare, sporadic genetic condition associated with learning disability, hemiplegia, epilepsy and headache for which children require multidisciplinary management. Guidelines for transition recommend: planning from age 14 years, identification of a key coordinator and a written transition plan for the young person.

**Objective:** To assess experiences of the transition process from paediatric to adult services for young people with SWS and their families.

**Methods:** An audit of all children and young adults aged 12–22 years known to the Sturge Weber Foundation (UK) database. Questionnaires were developed from existing healthcare transition questionnaires, and adapted to specifically evaluate key



## G316(P) Screening for Neonatal Hypoglycaemia, a single centre experience

Z Abusalah

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