

demographic data, clinical and laboratory data along with the prescribed therapy.

**Results** From the 1020 studied cases in 260 there was a diagnosis of indirect hyperbilirubinemia, associated pathology consisted of urinary tract infection in 15 cases, piodermatitis in 12, otitis media in 7, acute diarrhoea in 14 cases and severe dehydration in 9 cases.

Only one case complicated with kernicterus. From the 260 cases only 60 had phototherapy in the treatment schedule.

**Conclusion** we have shown that one quarter of the jaundice at newborn is due to indirect hyperbilirubinemia and that phototherapy is still a useful treatment.

**PO-0675** **PREVALENCE OF MUTATION C.11864G >A (P. TRP3955X) IN THE USH2A GENE IN PATIENTS WITH USHER II SYNDROME FROM VOLGA-URAL REGION OF RUSSIA**

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Usher Syndrome (US) is an autosomal recessive condition characterised by a combination of congenital hearing impairment and retinitis pigmentosa. To date, ten genes have been associated with US, representing up to 90% of cases. Three types of US are known and differ by onset of the symptoms, severity and progressiveness of deafness and additional vestibular dysfunction. Patients with type II US have congenital bilateral sensor neural hearing loss that is mild to moderate in the low frequencies and severe to profound in the higher frequencies, intact vestibular responses, and bilateral retinitis pigmentosa.

40 unrelated Usher II type families (60 patients) from Volga-Ural Region of Russia were studied using genotyping micro array (Usher, Asper-Biotech) for screening 614 mutations in genes *CDH23*, *MYO7A*, *PCDH15*, *USH1C*, *USH1G*, *USH2A*, *GPR98*, *CLRN1*, *DFNB31* and automatic sequencing of Usher's genes. Diagnosis was based on pedigree data, ophthalmologic, audio logical and vestibular examination.

We revealed homozygous and heterozygous genotypes for the c.11864G >A (p. Trp3955X) mutation (*USH2A*) in six unrelated families among Russian, Tatar and Chuvash patients with Usher II syndrome. We found four pathogenic mutations in coding region of 8 patients (p. Glu4458fs, p. Trp3955X, p. Glu4078fs, and p. Gly1392X), confirming their clinical diagnosis. The most frequent *USH2A* gene mutation was c.11864G >A (9/80 alleles; 11,25%). Mutation c.11864G >A in heterozygous state was also found in one Russian subject out of 1066 examined individuals from 16 various populations of Eurasia: Bashkirs, Tatars, Chuvashes, Udmurts, Komi-Permyaks, and Mordvins, Russians, Belarussians, Ukrainians, Veps, and Karelians, Abkhazians, Kazakhs, Uzbeks, Yakuts, Altaians. Study was supported by grants (No12-04-00342\_a, No12-04-98520\_r\_vostok\_a, 14-04-97002\_r\_povolgie\_a, 14-04-97007\_r\_povolgie\_a, 14-04-01741\_A).

**PO-0676** **PREDICTIVE VALUE OF POSTNATAL NASOGASTRIC TUBE AND CHEST/ABDOMINAL XRAY FOR ANTENATAL POLYHYDRAMNIOS AND/OR SMALL STOMACH IN THE DIAGNOSIS OF OESOPHAGEAL ATRESIA-TRACHEO-OESOPHAGEAL FISTULA**

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**Introduction** Oesophageal atresia (OA) ± trachea-oesophageal fistula (TOF) is a rare congenital anomaly which occurs in ~1/3500 total births.

Prenatal diagnosis of OA-TOF is desirable as it may improve patient outcome by optimising the pre- and postnatal management. Therefore, a high prenatal detection rate is desirable. Prenatal ultrasound is one of the modalities used in improving the diagnostic rate. Indirect or non-specific signs of suspected OA-TOF include polyhydramnios (10–20% of which are associated with fetal abnormalities, one of it being OA-TOF), absent/small stomach bubble, a blind ending upper oesophageal pouch and observation of fetal swallowing.

In our institution, all foetuses with Isolated polyhydramnios ± small/absent stomach have postnatal NGT insertion followed by xray if follow up scans remained the same.

**Objectives** To evaluate the clinical relevance of postnatal NGT insertion followed by xray for prenatal finding of isolated polyhydramnios ± absent/small stomach bubble in a cohort of newborn babies to assess for the diagnosis of OA-TOF.

**Methods**

- Retrospective cohort review January 2011-March 2014 of all foetuses/neonates with suspected EA-TOF on prenatal ultrasound (isolated polyhydramnios [deepest pool >8 cm, Amniotic Fluid Index >95th percentile for gestational age and/or small/absent stomach bubble] or perinatally identified to have >1500 mls amniotic fluid and therefore needing postnatal NGT insertion+ Xrays pre-feed were identified.
- Course and tip of NGT, stomach-bubble, vertebral anomalies or any other abnormalities detectable on Xray.
- Time taken from birth to when the postnatal Xrays were taken was calculated (time to first feed).
- Babies were also examined for clinical signs of OA-TOF or other abnormalities.
- Clinical data on all OA-TOF cases that were diagnosed postnatally over the same 3 yr period.
- Exclusion – above two features with other any other abnormalities on antenatal scans.

**Results**

- Total deliveries over period= 17,200.
- Total no. fulfilling criteria of isolated polyhydramnios ± small/absent stomach only = 48.
- No. that resolved antenatally and therefore did not have NGT +Xray assessment postnatally = 12.
- Total No. who had NGT+Xray assessment = 36.
- No. without OA-TOF = 35.
- No. diagnosed with OA-TOF = 1.
- 7 cases of OA/TEF (1 had above 2 features); of which 3 did not have polyhydramnios ± absent/small stomach; 3 had multiple abnormalities including 2 with polyhydramnios.
- Above two antenatal features had a Sensitivity =25%; Specificity =99.8%; positive predictive value=2.78% for diagnosis of OA-TOF.
- Mean time for NGT+Xray (away from mothers and before their first) = 156 mins (range 81–332).

## Conclusion

- Isolated polyhydramnios ± absent/small stomach is very poor at predicting diagnosis of OA-TOF
- Postnatal NGT+Xray are not indicated in isolated polyhydramnios ± small/absent stomach.

Separating these babies from their mothers is not warranted.

PO-0677 WITHDRAWN

PO-0678 SATISFACTION QUESTIONNAIRE IN A NEONATAL INTENSIVE CARE UNIT: OUR 5 YEARS' EXPERIENCE

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**Objective** To compile and analyse the replies to questionnaires on patient satisfaction as a major parameter of quality assessment in the setting of a single neonatal intensive care unit (NICU) over a 5-year period.

**Methods** The NICU of Hillel Yaffe Medical Centre (Hadera, Israel) has utilised the ISO 9001:2008 standard for quality management system since 2007. The responses of the neonates' parents to a satisfaction questionnaire throughout a 5-year period were retrieved and analysed.

**Results** The responses to a total of 1223 satisfaction questionnaire were available for analysis. Most of the parents were satisfied with the service, and some of them suggested improvements in features whose shortcomings were unknown to us and could easily be remedied for the most part.

**Conclusions** The replies to the questionnaire identified components of care that parents found to be satisfactory and others that they wished could be changed. A satisfaction questionnaire is an easy tool for the improvement of service, and the use of the one we constructed and describe is recommended to guide the enhancement of quality medical care in an NICU.

PO-0679 NEONATAL ADAPTATION IN INFANTS PRENATALLY EXPOSED TO ANTIDEPRESSANTS; CLINICAL MONITORING USING NEONATAL ABSTINENCE SCORE

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**Background** Intrauterine exposure to antidepressants may lead to neonatal symptoms from the central nervous, respiratory and gastrointestinal system. Neonatal Abstinence Score, NAS, has routinely been used to assess infants exposed to antidepressants *in utero*.

**Aim** To study neonatal maladaptation syndrome in infants exposed to selective serotonin reuptake inhibitors (SSRI) or serotonin norepinephrine reuptake inhibitors (SNRI) *in utero*.

**Method** Retrospective cohort study of women delivering at Karolinska University Hospital Huddinge between January 2007 and June 2009, who were using antidepressants during pregnancy, and their infants. Information was collected on maternal

and infant health, social factors and pregnancy. NAS sheets were scrutinised.

**Results** Two hundred and twenty women with reported 3rd trimester exposure to SSRI/SNRI were included. Seventy-seven women (35%) used citalopram, 76 (35%) sertraline, 34 (15%) fluoxetine, 33 (15%) other SSRI/SNRI. Twenty nine infants (13%) were admitted to the neonatal ward, 19 were born prematurely. Hypoglycemia (plasma glucose <2.6 mmol/L) was found in 42 infants (19%). NAS was analysed in 205 patients. Severe abstinence was defined as eight points or higher (scale with maximum 41 points), mild abstinence as 4–7 points, on at least two occasions. Seven infants (3%) had signs of severe abstinence and 46 (22%) mild abstinence symptoms.

**Conclusions** Severe abstinence was rare in this cohort of infants exposed to SSRI/SNRI and the majority of all scored infants had no signs of neonatal maladaptation. Hypoglycemia was detected in one out of five infants and might be overrepresented in SSRI/SNRI exposed infants.

PO-0680 TEMPERATURE ON ADMISSION AND RELATED MORBIDITY AND MORTALITY IN NEONATES WITH 26 WEEKS GESTATIONAL AGE OR LESS

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**Background and aims** The perinatal factors associated with hypothermia at admission and its relation with morbidity and mortality during the neonatal period has not been systematically studied in our area. We aimed to know the temperature on admission of infants ≤26 weeks GA and to determine whether it was associated with perinatal variables and with selected morbidities and mortality.

**Methods** We included inborn infants ≤26 weeks GA without major congenital anomalies, admitted to the NICUs participating in the Spanish SEN1500 network, during the period 2006–2010. We used multivariable linear or logistic regressions to detect independent associations.

**Results** 1,749 inborn infants were included. The mean admission temperature was 35.5 ± 0.9°C (range: 33.1–39.0°C). The proportion of infants with a temperature <36.5°C was 85.8%. The association between perinatal variables with admission temperature was:

**Conclusions** Hypothermia on admission is frequent among infants ≤26 weeks GA, and is associated with lack of antenatal steroid, lower birth weight, vaginal delivery, multiplicity and neonatal depression. A low temperature on admission is related to an increased risk of BPD, IVH and mortality. After adjusting for potential confounders, temperature on admission was related

Abstract PO-0680 Table 1

Variable	Parameter Estimate, °C	95% CI	p
Birth weight (per 100 g increase).	0.173	0.146 to 0.201	<0.001
Antenatal steroids	0.184	0.068 to 0.300	0.002
Caesarean section	0.236	0.150 to 0.322	<0.001
Multiplicity	-0.157	-0.253 to -0.062	0.001
5 min Apgar score ≤3	-0.058	-0.088 to -0.028	<0.001