

(per 10,000 births) in the neighboring country of Iran and 4.9 (per 10,000 births) in Hungary. These figures show that an “outbreak of NTDs” is seemingly being occurred in the Iraqi region of Al-Ramadi in the west of the country. The rate of NTDs in this region of Iraq is about 2.6, 3.4, 3.8, 4.7 and 6.7 times higher than that of reported from Cuba, Norway, China, Iran and Hungary, respectively. It is also 3.2 times higher than that of estimated/expected for the global population.

Comments The very high occurrence of NTDs in this Iraqi region indicates that there is an urgent need for an action by regional health authorities and international agencies to the control of this outbreak in the area.

620 THE PATTERN OF NEURAL TUBE DEFECTS IN A HIGHLY ENDOGAMOUS SOCIETY: 25 YEAR INCIDENCE TRENDS

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¹B Kurdi, ²A Bener. ¹Department of Paediatrics, Hamad Medical Center; ²Public Health, Weill Cornell Medical College & Hamad Medical Corporation, Doha, Qatar

Objective The aim of this study is to determine the incidence and trends of NTD over a period of 25 years in the State of Qatar.

Design This is a retrospective hospital based cohort study.

Setting The survey was carried out in the main territory hospital in the State of Qatar.

Subjects and methods The study was conducted from 1985 to 2009 with a total of 302,049 newborns at the Women’s Hospital in Qatar screened for NTD. NTD were defined according to the International Classification of Diseases, Tenth Revision (ICD-10). Study parameters included age, gender, ethnicity, parental consanguinity, and residential area.

Results The combined prevalence of NTD (total myelomeningocele and anencephaly) during the 25 years period was 1.09 per 1000 births. The prevalence of anencephaly was 0.36 per 1000 births. There were 131 (42.1%) males and 180 (57.9%) female newborns with NTD, corresponding to incidence of 0.899 and 1.289 per 1000 in male and female newborns, respectively. This difference was significant ($p < 0.001$). Consanguinity was seen in 36.7% of the parents.

Conclusion The present study revealed that Qatar has a relatively low incidence of NTD which is comparable to neighboring countries in the Arabian Gulf region. High rates of consanguinity and lack of periconceptual folic acid intake among mothers appear to be the major factors contributing to NTD in Qatar.

621 POLYMORPHIC LENGTH OF FOXE1 ALANINE STRETCH IN ISOLATED CLEFT LIP AND/OR PALATE

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¹HP Hsiao, ³HH Lin, ⁴CY Chen, ²BH Chen, ²MC Chao. ¹Department of Paediatrics, Kaohsiung Municipal Hsiao-Kang Hospital; ²Department of Paediatrics, Kaohsiung Medical University Hospital, Kaohsiung Medical University; ³Department of Laboratory Medicine, Kaohsiung Municipal Hsiao-Kang Hospital; ⁴Department of Dentistry, E-Da Hospital, I-Shou University, Kaohsiung, Taiwan R.O.C.

Background and Aim Isolated cleft lip with/or cleft palate (CL/P) is a common complex birth defect that varies in prevalence with Asian and Amerindian ancestry having the highest rates. While several genes had significant association to the CL/P, the *FOXE1* gene is involved in embryonic formation and is expressed in the secondary palate epithelium in human fetus. Since the first description of *FOXE1* mutation found in cases of cleft palate, thyroid agenesis and choanal atresia, Moreno had conducted a genome-wide scan for CL/P patients and confirmed the highly linkage to the 9q23–33, which resided the potential *FOXE1*. Herein, we are trying to investigate the isolated CL/P in Taiwan to see whether the polymorphic length of *FOXE1* play an important role in the palatogenesis.

Method Eighty patients with isolated CL/PCL/P and one hundred controls were recruited in the study. Genomic DNA was amplified by PCR the amplicons containing polyalanine tract (234 to 258 bp; 11–19 alanines) were purified, then directly sequenced.

Results and conclusion The 14/14 genotype in polymorphic alanine stretch was most frequent both in cases (98.7%) and in controls (98.0%), whereas the heterozygous 14/16 accounted for one case and two controls. The 14 alanine stretch accounts for the major allele frequency of the polymorphic length in *FOXE1* which consists of the high frequency in previous report from Japan. Although CL/P patients was linked to *FOXE1*, the polymorphic *FOXE1* alanine stretch has no association with isolated CL/P in Taiwan. It appears to reflect the heterogeneity in formation of CL/P, perhaps a population difference.

622 CONGENITAL CYSTIC ADENOMATOID MALFORMATION: IS IT ALWAYS BAD NEWS?

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¹K Yadav, ¹D Vasudev, ²J Budd, ¹A O Akuma. ¹University Hospitals of Leicester; ²University of Leicester, Leicester, UK

Aim To evaluate whether conservative approach to management of asymptomatic neonates with antenatal diagnosis of congenital cystic adenomatoid malformation of the lungs (CCAM) is safe and appropriate.

Method We undertook a retrospective review of all cases with antenatal diagnosis of CCAM from 2004–2010 in a lead perinatal centre. Pertinent data was extracted and the outcome and management of all affected infants were reviewed up to 1 year of age.

Results Twenty-six pregnancies were complicated with CCAM. Three pregnancies were excluded: two terminated and one fetus had bronchogenic cyst. Twenty-three singleton pregnancies were included in the study. There was a threefold increase in CCAM in the last two years of the study as compared to the first two years. CCAM lesions underwent complete resolution in four (17%) fetuses, partial resolution in 12 (52%), remained static in four (17%) and increased in one (4%) fetus. Eleven (48%) fetuses did not have any associated complications. 15 (65%) infants were asymptomatic at birth and eight (35%) were symptomatic. In two symptomatic infants respiratory distress resolved spontaneously. Three symptomatic infants had surgery and one died. A further three symptomatic preterm infants died due to extreme prematurity. All the surviving, non-operated infants: 17 (74%) were followed up and none required hospitalization or surgical interventions in infancy.

Conclusions Our study shows that **conservative management** of asymptomatic infants with CCAM; consisting of symptoms surveillance, radiological investigations and consideration for surgery if symptoms arise and persist is safe and may be more appropriate to elective surgery in infancy.

623 GASTROSCHISIS TRANSFERS CONDUCTED BY THE WEST MIDLANDS NEONATAL TRANSFER SERVICE

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¹A Shenvi, ²J Harrison, ^{1,2}A Philpott, ^{1,2}A Dhillon, ¹SV Rasiah. ¹Department of Neonatal Medicine; ²West Midlands Neonatal Transfer Service, Birmingham Women’s Hospital, Birmingham, UK

Background and Aims Gastroschisis has an incidence of approx. 3 per 10,000¹ with an increasing trend in the UK.² Gastroschisis requires immediate postnatal surgical care. Within the West Midlands, newborns with gastroschisis are resuscitated and transferred by WMNTS to a surgical centre. Network guidelines suggest completion of transfers within 4 hours of birth.

Methods Retrospective review of gastroschisis transfers conducted by the WMNTS from Jan 2008 to Dec 2011.

Results

Abstract 623 Table 1 Results

	2008	2009	2010	2011
Total number of gastroschisis transfers	28	17	25	18
Median gestational age in weeks (range)	37 (30+5–40)	37 (34–40)	36 (33+2–39)	36 (28–39+4)
Median birth weight in grams (range)	2380 (1175–3350)	2590 (1920–4240)	2470 (1620–3470)	2320 (1327–3150)
Median stabilization time in min(range)	50 (30–160)	50 (25–115)	50 (25–205)	45 (25–130)
Median time to complete transfer (range)	80 (45–220)	80 (40–170)	80 (50–195)	80 (40–200)
Facial oxygen	5	2	3	3
Ventilated	1	1	4	2
Out of region transfers	5	2	1	0

Conclusions 88 transfers for gastroschisis were conducted over the period. 91% babies were kept within region and transferred within an average time of 80 min in keeping with the network guideline. There have been no patient related clinical incidents.

References

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624 INCIDENCE AND OUTCOMES OF ANTENATALLY DETECTED RENAL ANOMALIES

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S Habiballah, S Al-Saedi, H Alsagoff, A Al-Dabbagh, A AbulHamil, A Marzouki, B El-Deek, JA Kari. *Pediatrics, King Abdulaziz University, Jeddah, Saudi Arabia*

Purpose Antenatally detected urinary tract abnormalities (ADUTA) are increasingly recognized. Our aims were to determine the incidence and outcomes of antenatally diagnosed congenital hydronephrosis in a large cohort.

Methods We reviewed the records of 18,853 deliveries between January 2008 and December 2011 at King Abdulaziz University Hospital, Saudi Arabia. ADUTA were recorded and their postnatal medical records were reviewed for demographic and radiological data.

Results ADUTA were diagnosed in 327 fetuses (1.7%). The commonest pathology was congenital hydronephrosis (n=313, 95.7%). Cystic renal anomalies were reported in four babies (1.2%) and 10 children (3.1%) were reported to have other renal anomalies, including duplex kidneys or a single kidney. Two-hundred and forty babies with congenital hydronephrosis were followed-up. Hydronephrosis resolved in 99 children (41.2%) within 2 months of birth. Twenty-nine subjects had underlying renal anomalies (12.1%), including vesico-uretral reflux (n=12, 5%), pelvi-uretric junction obstruction (n=14, 5.8%) and posterior urethral valve (n=3, 1.25%). The best predictor for non-resolving congenital hydronephrosis and underlying anatomical abnormalities was the AP diameter on the first post-natal scan. A cut-off point of 5 mm was found to be 83% sensitive in predicting non-resolving hydronephrosis, while 7 mm was 88% sensitive and 10 mm was 94% sensitive.

Conclusion Congenital hydronephrosis is the commonest ADUTA. A large percentage resolved within 2 months of birth, but underlying anatomical abnormalities were found in 12.1%. All babies with antenatally detected hydronephrosis should be examined by US postnatally but further radiological investigations should only be performed for persistent significant AP dilatation ≥ 10 mm.

625 MAJOR BIRTH DEFECTS AMONG BABY, S BORN IN QATAR

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KM Salameh, S Rahman. *Pediatric/NICU, Hamad Medical Center, Doha, Qatar*

Objective To determine the pattern of major congenital malformations in neonates admitted in a tertiaryCare NICU.

Study Design Descriptive study. Place & Duration of study; Women's Hospital Doha Qatar, The only tertiary government hospital in Doha with 310 beds, 16500 deliveries per year and around 85% of delivery in this hospital.

Method ALL neonates which admitted to NICU including those referred from outside. NeonateWith major congenital malformations were identified by clinical examination and confirmed byAppropriate radio-diagnostic methods. The pediatric service of the hospital has the subspecialties in cardiology, neonatology, neurology, nephrology, genetics and pediatric surgery. There are laboratory facilities for plain and contrast radiography, computerized tomography, ultrasound, echocardiography, chromosomal analysis and electron microscopy. Each case was investigated as indicate. Detail chromosomal analysis, Fish study and DNA was DONE infants with dysmorphic features and multisystem defects.

Result During study period number of babies born 101160, number of admission to nicu11898, number of congenital malformations 1678, the incidence of major congenital malformations 1.67%.

Conclusions The study gives an overview of pattern of congenital Anomalies in a tertiary care center. Surveillance and Monitoring of congenital conditions is important for Identifying patterns of malformations.

626 AN 8-YEAR-OLD GIRL WITH MULTIPLE SUBCUTANEOUS NODULES: PILOMATRIXOMA

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¹B Kılıçaslan, ²İ Erol, ³A Gümüş, ⁴A Eryılmaz. ¹Department of Pediatrics; ²Department of Pediatrics, Division of Child Neurology; ³Department of Pediatrics, Division of Cardiology; ⁴Department of Dermatology, Baskent University Hospital, Adana, Turkey

Backgrounds and aims Pilomatrixoma commonly occurs in children as a single tumor. Multiple tumors are rare. This case report describes the presentation of an 8-year-old girl with multiple pilomatrixomas.

Case Report An 8-year-old girl presented with 4 subcutaneous, rock-hard nodules. The average time from the onset of the appearance of other nodules was about 12 months. The sites of occurrence were the right eyebrow, neck, right scapular region, and upper left region of the abdomen. Only the nodule in the abdominal region was 1 cm in diameter, the others were 5 mm in diameter. The nodules were nontender and painless except the 1 in the right scapular region. The overlying skin was normal in appearance, with no evidence of ulceration or discoloration. No concurrent disorders were observed. The preliminary clinical diagnosis was multiple pilomatrixoma. The nodules were tender and painful, and the larger one was surgically excised. Histologically, the nodules consisted of acellular material in which ghost cells (figure-1) were prominent, together with foreign body giant cells and calcification. At the