2012

Total no of LP done: 5 (13%)
 WCC range: 1-26
 Positive CSF culture: 0

2013

Total no of LP done: 17 (29%)
 WCC range: 1-7
 Positive CSF culture: 0

Abstract G132(P) Figure 4 Lumbar puncture

48 h of antibiotics increased from 44% to 68%, due to our microbiology laboratory operating on a 48 h reporting system for specimen cultures as opposed to 36 h as suggested by NICE (Figure 3). More neonates with negative blood cultures but with elevated C-reactive protein (CRP) were receiving longer courses of antibiotics. Performing lumbar puncture if the CRP >10 mg/L resulted in a 16% increase in the number performed, with no significant clinical impact (Figure 4).

Conclusion

Implementation of NICE guidelines in our unit has resulted in increased cost due to more neonates receiving antibiotics for longer duration. In order to achieve NICE's cost saving projections, further clarification on criteria for starting maternal intravenous antibiotics is needed, as is a clearer definition of 'strong suspicion of sepsis' in neonates with negative blood culture, and a change in hospital laboratory reporting protocol.

G133(P) PERSISTENT PULMONARY HYPERTENSION IN NEWBORNS FOLLOWING PRETERM RUPTURE OF MEMBRANES- A CASE SERIES

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Historically it has been understood that babies born after a prolonged period of oligohydramnios, secondary to PROM at an early gestation, have pulmonary hypoplasia which leads to severe respiratory failure. We present a case series of infants with a history of PROM who presented in the first few hours of life with severe respiratory failure and were treated with iNO. The clinical response to iNO suggests that the underlying cause of the respiratory failure is predominantly PPHN rather than pulmonary hypoplasia.

13 infants with Gestational age range 26–29 weeks had SROM ranging from 15–27 weeks gestation. Median duration of ROM was 39 days. In the nine cases in whom antenatal information was available, four had a history of oligohydramnios and four had anhydramnios. In five there was evidence of chorioamnionitis on placental pathology, of whom four had clinical chorioamnionitis prior to delivery.

Oxygenation index (OI) just prior to iNO ranged from 112–552 and the reduction in OI after starting iNO can be seen in Figure 1. There is no difference in days on ventilation when compared to gestation matched controls without PROM, but they appear to require supplementary oxygen for longer.

This case series demonstrates a marked improvement in hypoxic respiratory failure in babies with PPRM and oligohydramnios (regardless of gestation), providing evidence that the

Abstract G133(P) Figure 1

aetiology is primarily PPHN. This is supported by the paper which demonstrates a reduction in Nitric Oxide Synthetase following PROM.

We suggest that, where possible, mothers with PROM and oligohydramnios should be delivered in a tertiary referral centre where iNO therapy is immediately available.

G134(P) QUESTIONNAIRE BASED NATIONAL SURVEYS – THE HURDLES AND HEART ACES!

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Introduction British Paediatric Surveillance Unit (BPSU) promotes study of rare diseases and infections by orange card reporting system and subsequent questionnaire based surveillance. We conducted a study of surgically ligated PDA in preterm babies between September 2012 and September 2013. The questionnaire had 10 parts with a total of 43 questions to answer. 18 of these were generic questions and could have been answered by non-medical staff. The questionnaire was designed after balancing the number of questions against the completeness of the data required. The aim of this abstract is to outline some of the difficulties of such questionnaire based national surveys and possible solutions.

Results 531 cases were reported and questionnaires posted to the relevant Consultants. 10% of these questionnaires were not returned and similar percentages were reported in error (see Figure 1).

Multiple reporting occurred in 96 cases – 83 of them were duplicates, 12 were triplicates and 1 case was reported by 4 different clinicians. Incomplete data was provided in 96 cases. This was less with multiple reporting ones 11/96 (11.4%) compared to 82/199 (41%) cases which were reported once. Multiple reporting thus helped us to obtain more information about the case. But this also resulted in some discrepancies in the reporting of 12 (12.5%) cases.

Conclusions In our experience, we felt that email correspondence was quicker and had a better response rate compared to paper correspondence. Division of the questionnaire into medical and non-medical parts could enable the clinician to concentrate on the relevant medical information and leaving the non-medical information to be filled in by administrative staff.

The longer the time that lapsed between the case being reported to the BPSU and the questionnaire being completed by the Consultant, the more incomplete was the reported data.

Improvements in data ascertainment might be possible in a neonatal project if the research team were able to access national

Total Questionnaires sent = 531

Abstract G134(P) Figure 1

databases such as BADGER system for named patients to improve the accuracy and quality of data.

This type of surveillance has great epidemiological and clinical impact. Identifying key issues and addressing them early can ensure high quality data is collected and disseminated.

G135(P) CHASING THE WELSH DRAGON: A REVIEW OF THE OUTCOME OF INFANTS WITH NEONATAL ABSTINENCE SYNDROME OVER A 10 YEAR PERIOD

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Introduction Neonatal abstinence syndrome (NAS) is a complex, multi system disorder which not only involves acute withdrawal, but also long term morbidities. We looked at infants with NAS at the Royal Gwent Hospital (RGH), and studied the impact of the condition on their health over a 10 year period.

Methods Infants born in RGH with a diagnosis of NAS between 2000 – 2010 were identified from the neonatal and transitional care admission registers. Clinical work station documents plus the neonatal database were used to gather information.

Results The total number of infants with a diagnosis of NAS was 231; 101 were admitted to the neonatal unit. 83% of babies had urine toxicology performed and the commonest result was methadone plus opiates (26%). Of the babies admitted to the unit, the average duration of stay was 20 days and all required pharmacological management. In our cohort, 15% developed ophthalmological disorders, including squint, nystagmus and delayed visual maturation; 13% had developmental problems and 44% of these showed speech and language delay. 43% of the 231 infants attended A&E at least once during early childhood; head injury was common.

Conclusion The incidence of NAS in South Gwent in the decade 2000 to 2010 is around 8/1000 live births. Approximately 1 in 7 infants develop ophthalmological disorders and 1 in 8 have developmental problems. We conclude that infants with NAS in the neonatal period have significant ongoing morbidity and remain a vulnerable group who may benefit from enhanced targeted health surveillance.

G136(P) A 4 YEARS REVIEW OF CONJUGATED HYPERBILIRUBINAEMIA IN A TERTIARY NEONATAL REFERRAL CENTRE

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Aim To establish the incidence of conjugated hyperbilirubinaemia over a 4 years period in a tertiary neonatal unit and to review the demographic data, the investigations and treatments they received.

Method A retrospective observational study between 01/06/2010 and 28/02/2014. Data was retrieved from the neonatal database BADGER. Search term: conjugated hyperbilirubinaemia or ursodeoxycholic acid.

Result Less than 1% (40/5237) admissions to the neonatal unit had conjugated hyperbilirubinaemia. 70% were less than 33 weeks gestation. 60% weighed less than 1251g. 33 infants (82%) received total parenteral nutrition (TPN). Variable numbers of babies were investigated for different conditions (24 infants had