SHOULD TORCH SCREEN ROUTINELY PERFORMED IN ASYMPTOMATIC SYMMETRICAL SMALL FOR GESTATIONAL AGE (SGA) BABIES?

A Gupta, S D’Ambrosio, P Suresh, S Saran, S Gupta. Department of Paediatrics, University Hospital of North Tees, Stockton-on-Tees; *Newcastle University, Newcastle Upon Tyne, UK

Background and Aims The causes of symmetrical SGA babies include infection during intrauterine period. Screening for Toxoplasmosis, Rubella, Cytomegalovirus and Herpes (TORCH) is routinely performed in these SGA babies to identify the infective cause of growth restriction.

This study was carried out to study the usefulness of routine TORCH screening in symmetrical SGA babies.

Methods

• Newborn babies were identified from the immuno-pathology database of University hospital of North Tees for whom TORCH screening was requested from 1st January 2008 to 31st December 2011.
• The demographic and clinical details of all identified babies were obtained from the case notes and results of TORCH screen mapped to each baby.
• The reason for each request was obtained. Based on clinical details and coding each baby was grouped into symptomatic or asymptomatic group.

Results

• Over the 4 year study period there were 15000 babies born in this hospital. There were 153 TORCH screens requested in this period. Of these 70 were requested for symmetrical SGA babies.
• All asymptomatic symmetrical SGA babies had negative results of TORCH titres. Only 2 babies were positive for cytomegalovirus infection and both of these had signs of congenital infection such as thrombocytopenia and hepatosplenomegaly.

Conclusions

• TORCH screening should only be requested when clinical signs or symptoms of congenital infection are present.
• There is no justification of routinely testing asymptomatic SGA babies for TORCH titres.

THE INCIDENCE OF SEPSIS IN PRETERM INFANTS DELIVERED BY ELCS FOR MATERNAL PET WITHOUT SEPTIC RISK FACTORS

C Gormley, E Houlihan, P Flanagan, C Gaffney, N McCallion. *Department of Paediatrics, RCSI; †Department of Paediatrics, Rotunda Hospital; ‡Department of Paediatrics, Rotunda Hospital/Royal College of Surgeons in Ireland, Dublin, Ireland

Background Preterm infants are at an increased risk of developing early-onset sepsis compared to term infants. The reasons for this are numerous, but mainly revolve around their inherently immature immune system and its inability to fight pathogenic microorganisms effectively. The main cause of early-onset neonatal sepsis is vertical exposure to infectious pathogens which colonise the vaginal canal of the mother.

Aim To assess the incidence of sepsis in infants delivered by elective LSCS for maternal PET.

Methods Retrospective chart study of VLBW infants admitted to the NICU in the Rotunda Maternity Hospital in Dublin, between the years 2008–2011 following delivery by LSCS for maternal PET with no septic risk factors.

Results All 79 infants were of < 34 weeks gestation and had had septic work-ups completed on admission to the NICU. All of the infants were treated prophylactically for early-onset sepsis with antibiotics for 48 hours. Investigation of the septic screens included FBC, CRP and blood culture results at both 48 hour and 5 days. On review of all 79 septic screens, none of the infants had positive blood cultures at either 48 hours or 5 days. Similarly, none of the infants displayed any haematological signs indicative of early-onset sepsis. Mild deviations were observed in some of the haematological results, but these can be explained by the effects of PET on the infant.

Conclusion Despite the absence of any early-onset septic risk factors, all 79 infants were unnecessarily treated with a 48 hour course of prophylactic antibiotics.

ANTIBIOTICS FOR THE TREATMENT AND PREVENTION OF NEONATAL EARLY ONSET INFECTION: NICE GUIDELINE


Background Early onset neonatal infection (EONI) is serious but uncommon. In England c. 10% of babies are treated for suspected EONI but practice varies significantly. The National Institute for Health and Clinical Excellence has developed guidelines for England.

Methods The guideline was developed according to the procedures in the NICE Guidelines Manual (2009).

Results The principles underlying the recommendations were: a) start antibiotics as quickly as possible; b) minimize the extent of antibiotic exposure in babies without an infection; c) continuous assessment of blood culture status in automated systems provides reliable information about whether a significant isolate is present; antibiotics can be stopped safely if blood cultures are negative 24–36 hours after they are taken. The key recommendations relate to: 1. The early administration of antibiotics; 2. The timely cessation of antibiotics if blood cultures are negative, the baby is well and a CRP measurement c. 24 hours after the start of antibiotics is normal; 3. The value of investing in information technology to support timely reporting of blood culture results to clinical areas because improved systems are likely to pay for themselves through reductions in hospital stay.

Conclusion The severity of EONI requires urgent action at the first suspicion of infection. Modern laboratory technology allows an early cessation of antibiotics in the majority of babies who are not infected.

VANCOMYCIN RESISTANT ENTEROCOCCI (VRE) COLONISATION IN A NICU

F Guven, A Say, S Degirmenci, N Uygur Kucu, T Sabuncu, M Inalhan, Zeynep Kamil Maternity and Children Diseases Training and Research State Hospital, Istanbul, Turkey

Nowadays antibiotic resistant bacteria are found in community but more frequently in hospital environments. Development of resistant bacteria (gram positive cocci, esp. enterococci) to glycopeptide antibiotics are becoming important.

On behalf of infection, control after detection of VRE surveillance studies must be performed. To determine and control the rectal VRE colonisation in our NICU the rectal swabs of 760 neonates were taken and send to the laboratory at admission for the last year, 2011.