

BRITISH PAEDIATRIC SURVEILLANCE UNIT

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Group B Streptococcal Disease in Infants <90 Days of Age

(Short Study Name: Group B Strep)

Abstract

Group B Streptococcus (GBS) is the most common cause of serious bacterial infections (e.g. septicaemia, pneumonia) in the first week of life and of meningitis in the first three months of life. Approximately 10% of babies with GBS disease will die and neurodisability occurs in up to 50% of survivors of GBS meningitis. Our previous BPSU study (2000-2001) remains the only national UK and Ireland enhanced surveillance study.

Early onset GBS disease may be prevented by antibiotics given intravenously to the mother during labour; national guidelines introduced in 2003 and updated in 2012 currently recommend this for women with certain risk factors. Late onset disease however is not currently preventable. A vaccine against GBS has been developed and is currently being tested in pregnant women. We therefore need to collect the best available evidence in order to assess the impact of current prevention guidelines as well as providing the baseline for a GBS vaccine program.

The study is being led by St. George's, University of London and Public Health England. The information will be collected and collated on a PHE web based surveillance system.

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Website	www.rcpch.ac.uk/bpsu/GBS
Background	Invasive GBS disease is a serious bacterial infection in infants of less than 90 days of age with potentially significant morbidity and mortality. Knowledge of the current epidemiology in this age group is needed to assess impact of current guidelines and provide baseline information for a GBS vaccine programme.
Coverage	United Kingdom and the Republic of Ireland
Duration	April 2014 – April 2015 (13 months surveillance)
Research Questions	<p>The specific objectives of this study are to determine:</p> <ul style="list-style-type: none"> ▪ The incidence of invasive GBS disease in UK and Irish infants aged < 90 days ▪ The clinical presentation of cases of invasive GBS in infants ▪ The frequency of established aetiological factors in cases of GBS disease ▪ The proportion of cases with risk factors (as per national guidelines) where the mother did not receive antibiotics ▪ The mortality ▪ The short-term complication rates (at hospital discharge) ▪ The GBS serotypes that are responsible for invasive GBS disease ▪ The antibiotic susceptibility of disease-causing GBS isolates
Case definition	Any case of invasive group B streptococcus (GBS grown from a sterile site) in an infant of less than 90 days of age.
Reporting instructions	Please report any baby seen in the last month who meets the case definition in the UK or the Republic of Ireland from April 2014.
Methods	<p>Paediatricians reporting a case through the BPSU orange card system will be asked to complete either a paper or a web-based questionnaire regarding demographic and clinical information about the infant and mother.</p> <p>If a case is notified via a laboratory the named paediatrician for the infant will be contacted and asked to complete the questionnaire.</p> <p>The information will be collected via an online data collection tool.</p>
Funding	Meningitis Now
Support Group	Group B Strep Support
Ethics approval	This study has been approved by NRES Committee – Brighton and Sussex REC. Ref: 13/LO/1912. Public Health England has approval under Section 251 of the NHS Act 2006 to process confidential patient information for public health purposes (see http://www.legislation.hmso.gov.uk/si/si2002/20021438.htm).