Group B Strep Support

UK NSC GBS Screening policy and review

Prof Alan Cameron, Vice President Clinical Quality, Royal College of Obstetricians & Gynaecologists

Royal College of
Obstetricians and Gynaecologists

Bringing to life the best in women's health care

UK NSC GBS Screening policy and review

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GBSS Conference, 3rd November 2015

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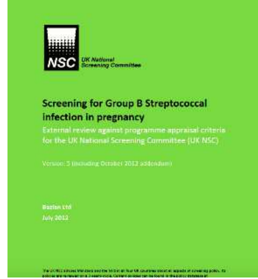

NSC UK National Screening Committee

Screening for Group B Streptococcal infection in pregnancy

External review against programme appraisal criteria for the UK National Screening Committee (UK NSC)

Version: 5 (including October 2012 addendum)

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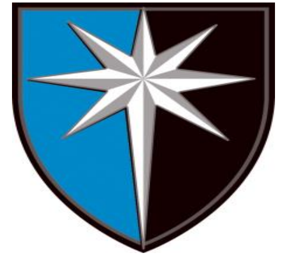
July 2012

UK NSC’s Current Policy Position



UK National Screening Committee’s Current Policy Position on antenatal screening for GBS carriage (2012)

- Routine screening for Early Onset group B streptococcus (GBS) carriage in late pregnancy for all pregnant women is currently not recommended in the UK
- Insufficient evidence that benefits gained from screening all women in late pregnancy and treating those women with confirmed GBS carriage by intravenous antibiotics during labour outweigh harms
- Next review by UK NSC due 2015/16
- The literature review is being scoped and commissioned now

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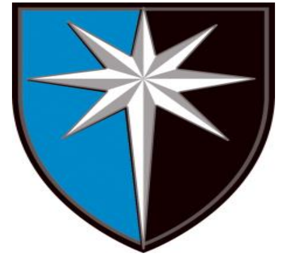
Rationale for the UK NSC's policy position



- We do not understand which babies will be affected by EOGBS disease amongst the thousands who are GBS carriers in late pregnancy
- In other screening programmes those with an initial screen positive result will go on to have another test to see who should receive treatment.
- The number of women needed to treat (NNT) is likely to be high in order to prevent one case of EOGBS

UK NSC. The UK NSC policy on Group B Streptococcus screening in pregnancy. London, 2012.

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Rationale for the UK NSC's policy position

- Rate of EOGBS in UK is similar to rates in countries where screening is recommended
- Most cases of EOGBS and related-deaths occur in premature babies delivered before suggested time period to test for GBS carriage (35 to 37 gestation weeks) BPSU survey 23/38 (60%) neonatal deaths were preterm
- Screening and intrapartum antibiotic prophylaxis (IAP) would not reduce the occurrence of late-onset GBS

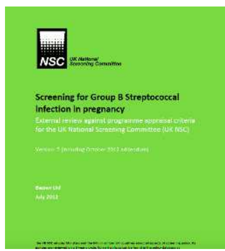
Rationale for the UK NSC's policy position

Screening may result in over-detection and over-treatment due to:

GBS carriage can be transient (One systematic review found out that on average only approximately 70% women who test positive for GBS on antenatal screening after 35 weeks also test positive in labour and 5% who test negative on antenatal screening will test positive in labour)

Current tests cannot distinguish between women at low and high risk of transmitting GBS to their babies

UK NSC. The UK NSC policy on Group B Streptococcus screening in pregnancy. London, 2012.


NSC
UK National Screening Committee

Screening for Group B Streptococcal infection in pregnancy

External review against programme appraisal criteria for the UK National Screening Committee (UK NSC)

Limitations of antibiotics to prevent EOGBS

Rationale for moderating the use of antibiotics among pregnant women with GBS carriage to prevent EOGBS in the baby

- Effectiveness of antibiotic treatment not certain
- Long term effects of antibiotic treatment during labour are unknown
- Increasing rates of other types of neonatal sepsis
- Concerns about antibiotic resistance
- Allergic reactions to antibiotics during labour
  - very small proportion of women
- Medicalisation of labour, especially for women at low risk

UK NSC. Frequently asked questions – Antenatal screening to prevent Early Onset Group B Streptococcus (GBS) infection. London, updated 2015.

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RCOG GBS audit

UK NSC's Policy Position statement (2012) recommended a strategy to improve understanding of policy, in collaboration with RCOG and NICE

RCOG-led GBS audit (2014) reflect this recommendation.

Aims of the audit

1. Investigate use of RCOG Green-top Guideline No.36 (2012) in obstetric units
1. Examine variation in preventative care for early-onset neonatal GBS (EOGBS)
1. Identify areas for improving guideline adherence and practice

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RCOG GBS audit

- Led by the Royal College of Obstetricians and Gynaecologists (RCOG) in partnership with the London School of Hygiene and Tropical Medicine (LSHTM)
- Supported by the Royal College of Midwives (RCM)
- Commissioned by the UK National Screening Committee (NSC)

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Components of the audit

1. Survey of NHS obstetric units in the UK
1. Survey of NHS midwife-led units in the UK
1. Review of local protocols on preventing EOGBS
1. Review of patient information on GBS
1. Analysis of routinely collected maternity data on neonatal GBS infection
1. Case vignettes on the impact of patient factors on clinical practice
1. *Feedback to maternity units*

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Audit project team

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Timescale of the audit

- Project development, October 2013
- Pilot study, December 2013
- Full audit started, February 2014
- Data collection ended, September 2014
- First report publication, March 2015
- Second and final report publication, December 2015 (provisional)

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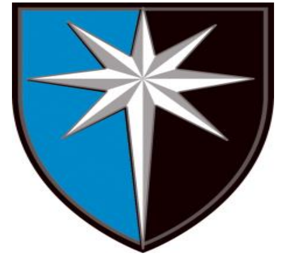
First report from the audit



https://www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/gbs-audit/

Survey of NHS obstetric units in the UK

- Results from n=161/190 eligible units

Analysis of routinely collected maternity data

- Hospital Episode Statistics (HES), data on NHS-funded hospital care in England (2004 to 2012)
- Data from eight NHS providers (2012 to 2013), as part of the RCOG Maternity Information Systems (MIS) pilot project

ROCG. Audit of current practice in preventing early-onset neonatal group B streptococcal disease in the UK. First report. London, 2015.

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RCOG Green-top Guideline No. 36

Intrapartum Antibiotic Prophylaxis (IAP) is recommended for use in women who are at increased risk of exposing their baby to maternal GBS around the time of birth, with at least one of the following risk factors:

- Previous baby with invasive GBS infection (GBS-specific IAP)
- GBS bacteriuria in the current pregnancy (GBS-specific IAP)
- Vaginal swab positive for GBS in current pregnancy (GBS-specific IAP)
- Pyrexia (above 38 °C) in labour (broad-spectrum IAP with GBS cover)
- Chorioamnionitis (broad-spectrum IAP with GBS cover)

RCOG. Group B Streptococcal Disease, Early Onset (Green-top Guideline No. 36). The Prevention of Early-onset Neonatal Group B Streptococcal Disease. London, 2012.

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Results of survey of obstetric units

- >90% of units reported having a written protocol for preventing EOGBS and providing written information on GBS to patients

- <5% of units reported offering universal screening for GBS carriage to all pregnant women

- Overall, adherence to the RCOG recommendations for GBS-specific IAP has remained stable since the first RCOG audit (2007)

But some discrepancies between…

- Reported practice and RCOG guidelines
  - e.g. Swab-based testing for GBS in pregnant women with risk factors and clinical indications for GBS-specific IAP contrary to guidance

- Responses from obstetricians and midwives working in the same unit

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Survey of obstetric units results

- 99.4% of units reported use of a written protocol for preventing EOGBS
- 94.4% of units reported provision of written information on GBS to patients
- 37.5% of units cited Group B Strep Support (GBSS) as a source of information on GBS infection compared with 36.8% of units citing the RCOG guideline
- 3.7% of units reported offering universal screening for GBS carriage to all pregnant women

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Survey of obstetric units results

- 55.9% of units reported offering selective, swab-based testing to pregnant women guided by risk factors or maternal request
- ≥97.4% of units reported adherence to RCOG advice on GBS-specific intrapartum antibiotic prophylaxis (IAP), compared with ≥83.7% of units for broad-spectrum IAP
- 41.2% of units where GBS-specific IAP was reported to be offered also reported that IAP was offered to women with preterm prelabour rupture of membranes (indication not supported by the RCOG)
- 15.0% of units reported offering IAP to women with preterm (<37 weeks) labour and intact membranes (indication not supported by the RCOG)

Maternity data results

Analyses using Hospital Episode Statistics

- Estimate of 1.2 to 1.4 cases of EOGBS per 1,000 live births
- Potential over-estimation due to coding of suspected but unconfirmed cases in HES records

Analyses using local maternity information systems data

- Data fields on GBS were poorly completed
- There is potential to improve the completeness and range of data fields about GBS given much higher completeness (up to 100%) of many other data fields
- The UK Maternity and Perinatal Audit will inform this data vacuum

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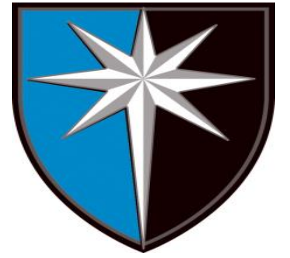
Recommendations from first report



1. Medical Directors should ensure that local guidelines on the prevention of EOGBS and written information on GBS provided to patients in obstetric units are reviewed regularly, reflect national guidelines and are fit for purpose
2. Reviews of practice on preventing EOGBS and other neonatal infections should be regularly undertaken in all obstetric units to ensure high-quality and consistent care
3. Guidance on non-GBS-specific indications for prophylaxis (e.g. use of broad spectrum antibiotics) should continue, supported by evidence
4. National guidelines, including those published by the RCOG, must be clear, coherent and consistent with other guidance
5. Inconsistencies in practice or knowledge about EOGBS prevention among staff in the same unit or provider should be challenged, and education and communication between all staff improved
6. More evidence is needed about the care received by women to refine national policy on the prevention of EOGBS, standardise local guidelines and to ultimately reduce the incidence of EOGBS

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Forthcoming results in second report

Survey of NHS midwife-led units

- Valid survey responses from 51% of eligible units
- Pregnant women with confirmed GBS carriage are accepted to some units
- GBS-specific IAP is available in some alongside midwife units

Review of local protocols on preventing EOGBS

- Review of protocols from 79% of eligible providers
- 30% showed evidence of being reviewed at least every three years
- 81% protocols stated recommended GBS-specific IAP regimen

Review of patient information on GBS

- 33 patient information leaflets reviewed
- 58% did not reference any clinical evidence or national guidelines
- 53% cited Group B Strep Support as an alternative source of information

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