Group B Streptococcus Guideline

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NHS Shetland Document Development Coversheet*

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ANMAC		

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Examples of reasons for presenting to the group	**Examples of outcomes following meeting**
• Professional input required re: content (PI)	• Significant changes to content required – refer to Executive Lead for guidance (SC)
• Professional opinion on content (PO)	• To amend content & re-submit to group (AC&R)
• General comments/suggestions (C/S)	• For minor revisions (e.g. format/layout) – no need to re-submit to group (MR)
• For information only (FIO)	• Recommend proceeding to next stage (PRO)
• For proofing/formatting (PF)	• For upload to Intranet (INT)

• Final Approval (FA)	• Approved (A) or Not Approved, revisions required (NARR)

***To be attached to the document under development/review and presented to the relevant group**

Please record details of any changes made to the document in the table below

Date	Record of changes made to document
Feb 2021	Adapted from Aberdeen Guideline. Version 0.1
27/04/2021	Minor changes to wording. Saved as version 0.2
27/04/2021	Addition of Quick Reference Guide
25/07/2021	Minor changes to document
18/08/2021	ANMAC approved. Saved as version 1.0

Contents

1. Purpose of the Guideline

The purpose of this document is to provide evidence-based guidance on the appropriate and most up to date practice for the prevention of early onset neonatal Group B Streptococcus (GBS) Disease for pregnant women in NHS Shetland.

2. Target Audience

This guideline is for midwifery and obstetric team working in NHS Shetland. This is of particular relevance to all clinical staff that have contact with women during the antenatal/intrapartum period who are affected/previously affected by GBS.

3. Aim

This guideline aims to provide evidence-based information on how to reduce the risk of early neonatal GBS infection through prophylactic measures in women deemed to be at risk of passing GBS to their baby during birth.

4. Definitions

GBS is carried by up to <40% of women, commonly in the vagina, and is a normal commensal bacterium usually carried without symptoms or side-effects. It can occasionally cause infection in newborn babies and very rarely cause infection during pregnancy. In the UK approximately 1 in 1000 babies born develop GBS infection (GBSS, 2019).

5. Patient Groups to which this document applies

This guideline is applicable to pregnant women who have GBS confirmed in their current or a previous pregnancy, or have a baby that has previously been affected. It is also applicable to women in preterm labour who should be offered intrapartum antibiotic prophylaxis (IAP).

6. Recommendations

- All pregnant women should be provided with an appropriate information leaflet such as the RCOG Group B Streptococcus (GBS) in pregnancy and newborn babies (RCOG, 2017) https://www.rcog.org.uk/en/patients/patient-leaflets/group-bstreptococcus-gbs-infection-pregnancy-newborn-babies/
- Women should be referred to the consultant obstetrician for a discussion about place of birth and management plan in labour either after 20 week scan or on diagnosis of GBS if later In line with the RCOG Green-top Guideline No. 36 'Prevention of Early-onset Neonatal Group B. Universal bacteriological screening for GBS is not recommended for all pregnant women.
- If a woman had GBS detected in a previous pregnancy, there is a 50% chance of maternal GBS carriage in the current pregnancy. Women who had GBS detected in a previous pregnancy should be automatically offered intrapartum antibiotic prophylaxis OR bacteriological testing in late pregnancy (usually at 35-37 weeks) should be discussed and offered. Testing should be offered 3-5 weeks prior to expected delivery date, for example twin pregnancies should be offered bacteriological testing at 32-34 weeks and management plan updated

- Women who decline intrapartum antibiotic prophylaxis OR bacteriological testing in late pregnancy and neonatal observations. This discussion should be documented in Badgernet and management plan updated The parents should receive a copy of the patient information leaflet RCOG Group B Streptococcus (GBS) in pregnancy and newborn babies (RCOG, 2017) this leaflet explains signs of GBS infection to be vigilant for.
- All women with a previous baby affected by either early or late onset GBS disease should be offered intra partum antibiotics.
- All vaginal swabs and urine specimens sent for culture and sensitivity should have antibiotic allergies stated on the lab form
- Women do not need to be treated antenatally if GBS has been identified on a vaginal swab.
- GBS found in urine at any stage of pregnancy requires treatment if result is above 10 (to the power of 5) but do need appropriate antibiotics in labour (check sensitivities on MSSU report).
- GBS found on a vaginal swab or in urine (MSSU) antenatally is an indication for intrapartum antibiotics.
- GBS antibiotic prophylaxis is not required for Caesarean Section with intact membranes
- Women who are known GBS carriers and have ruptured their membranes at term (>37 weeks gestation) confirmed by speculum and amnisure stick should be offered immediate intrapartum antibiotics and induction of labour as soon as is reasonably possible.
- Intrapartum antibiotics are recommended in confirmed preterm labour (<37 weeks) regardless if GBS is confirmed or not (RCOG, 2017).
- Intrapartum antibiotics should be given, where possible, at least 2 hours prior to delivery for optimum efficiency.
- Birth in a pool is not contraindicated if the woman is GBS positive provided she is offered intrapartum antibiotics.
- For women with preterm rupture of membranes and GBS positive the perinatal risks associated with preterm delivery <34 weeks gestation are likely to outweigh the risk of perinatal infection. For those >34 weeks it may be beneficial to expedite delivery if a woman is a known GBS carrier. Women who are less than 37 weeks pregnant should be transferred to Aberdeen if not in established labour. Women in labour should stay in Shetland and contact ScotStar for retrieval.
- If the woman has a baby previously affected by GBS, previous GBS or confirmed GBS in this pregnancy then the baby requires to have observations performed for 24 hours. Respiratory rate, temperature and heart rate must be performed at 1 hour old, then 2 hourly for 12 hours, then 4 hourly up to 24 hours of age.
- If the patient goes on to request an Early Transfer to Community Care the patient must have received and understood the patient information leaflet RCOG Group B Streptococcus (GBS) in pregnancy and newborn babies (RCOG, 2017) https://www.rcog.org.uk/en/patients/patient-leaflets/group-bstreptococcus-gbs-

infection-pregnancy-newborn-babies/ This leaflet explains signs of GBS infection to be vigilant for.

7. Management in Labour

- Give intrapartum intravenous (IV) antibiotics to all women with evidence of GBS infection
  1. Vaginally, rectally or in urine during the current pregnancy,
  2. Previous affected baby.
  3. GBS confirmed in previous pregnancy who have opted to have intrapartum antibiotic cover in current pregnancy
- Update management plan with the woman's decision accepted/declined intrapartum antibiotics or bacteriology testing.
- GBS Contact Scotstar at birth if the woman has additional risk factors to GBS – please see Early Onset Neonatal Sepsis Guideline'
- If there are no additional risk factors and no maternal or fetal compromise, women at term do not need continuous fetal monitoring in labour and can therefore labour/birth in a Midwifery Led Unit. Women may choose to give birth at Gilbert Bain Maternity in the absence of no other risk factors and careful counselling about the lack of neonatal facilities in Shetland.

7.1. Antibiotics

Give Benzylpenicillin 3g IV at start of labour and then 1.5g every 4 hours until birth*

3g IV loading dose reconstitute 2 x 1.2g vials each with 8ml Sodium Chloride 0.9% reconstitute 1 x 600mg vial with 4ml Sodium Chloride 0.9% add the solutions to 100ml bag of Sodium Chloride 0.9% and give by IV infusion over 30 minutes

1.5g IV dose reconstitute 1 x 1.2g vial with 8ml Sodium Chloride 0.9% reconstitute 1 x 600mg vial with 4ml Sodium Chloride 0.9% withdraw 8ml from the 1.2g vial and 2ml from the 600ml vial (10ml in total, 1.5g) Give the 10ml by SLOW IV injection over at least 5 minutes.

*high doses of Benzylpenicillin may lead to hypernatremia and hypokalaemia

Penicillin allergy – if the history of penicillin allergy suggests that the reaction is not likely to be allergic in nature (e.g. vomiting only) then penicillin should be given – discuss with consultant obstetrician during antenatal period

Clindamycin

If organism is known to be sensitive to Clindamycin: IV Clindamycin 900mg at the start of labour and every 8 hours until birth (alternatively if woman very reluctant to IV then give IM Clindamycin 600mg every 6 hours until birth)

Clindamycin 900mg IV dose add 3 ampoules (each contain 2ml ampoule contains 300mg Clindamycin (150mg/ml) = 6ml in total) to 100ml bag of Sodium Chloride 0.9% and give by IV infusion over 45 minutes (rate must not exceed 30mg per minute)

If organism is resistant to Clindamycin or sensitivity is unknown:

IV Vancomycin 1g at the start of labour and every 12 hours until birth

Vancomycin Reconstitute with water for injections. 1g IV dose Add 10ml to 500mg vial and 20ml to 1g vial. Dilute further in 250ml Sodium Chloride 0.9%. Infuse over 120 mins via an infusion pump (rate must not exceed 10mg per minute).

Cases requiring prophylaxis should have been identified antenatally and highlighted as an alert on Badger and antenatal and intrapartum management plans updated.

Women who are receiving GBS prophylaxis in labour, who then develop a pyrexia, must also be treated with a broad spectrum antibiotic.

References

Group B Strep Support (2019) what is Group B Strep Available from https://gbss.org.uk/info-support/pregnancy-and-birth/what-is-group-b-strep/

Patient Group Direction for administration of medicines as included in the midwives PGD formulary by midwives working in community midwives units within NHS Grampian. Available from: https://foi.nhsgrampian.org/globalassets/foidocument/foi-public-documents1---alldocuments/PGD_MidwivesF.pdf

Royal College of Obstetricians & Gynaecologists (2017) Prevention of Early-onset

Neonatal Group B Streptococcal Disease, Green-top Guideline No. 36 September 2017 Available from https://www.rcog.org.uk/en/guidelines-researchservices/guidelines/gtg36/

UK National Screening Committee (2017) Screening Pregnant Women for GBS Not

Recommended Press Release March 2017 Available from https://www.gov.uk/government/news/screening-pregnant-women-for-gbs-notrecommended

Appendix 1 – Quick reference guide

Antenatal

- Universal Screening – not recommended
- Laboratory request forms - include allergies to antibiotics and request sensitivities if allergic to Penicillin.
- Patient information leaflet should be given and discussed at the earliest opportunity
- Discussion with patient about contacting maternity department when labour starts or if spontaneous rupture of membranes occur
- Waterbirth can be offered

Diagnosis of new GBS on swab/urine

- Treat if urine result is 10 (to the power of 5) (not vaginal or rectal).
- Consultant review to discuss
- Place of delivery
- Offer IV antibiotics in labour,
- Adjust badgernet management box.

Previous GBS infection on swab (unaffected baby)

Offer Consultant review– discuss antibiotics in labour or repeat testing 3-5 weeks (usually 35-37weeks) prior to expected delivery date. Document discussion in badgernet and update management plan whether patient has accepted or declined.

Positive result

- Discuss place of delivery
- Offer IV antibiotics in labour
- Adjust badgernet management box.

Negative result

Offer Consultant review to discuss risk of recurrence and risk of false negative result

Discuss antibiotics

Previous baby with GBS or any preterm delivery <37 wks –

- Consultant review
- Discuss place of delivery
- offer antibiotics in labour

Caesarean sections –

Intact membranes do not require GBS antibiotics but will require pre-op routine antibiotics

Intrapartum

GBS positive and pre-labour rupture of membranes (PROM) >37 weeks

- Advise to attend as soon as possible
- Confirm PROM by speculum and amnisure
- Commence IV antibiotics
- Offer induction at the earliest opportunity
- Pyrexia in labour must be treated with broad-spectrum antibiotics

Postnatal

All patients should receive a copy of the patient information leaflet RCOG Group B Streptococcus (GBS) in pregnancy and newborn babies (RCOG, 2017) this leaflet explains signs of GBS infection to be vigilant for.

Discussion should take place about signs of infection in neonate including who to contact if baby is unwell.

Neonatal observations

Well term baby.

- Respiratory rate, temperature and heart rate must be performed at 1 hour old, then 2 hourly for 12 hours, then 4 hourly up to 24 hours of age.
- Recommended for all babies

Well term baby with additional risks/red flags

- Confirmed GBS in this pregnancy with additional risk factor/red flag - Parenteral antibiotic treatment given to the woman for confirmed or suspected invasive bacterial infection (such as septicaemia) at any time during labour, or in the 24-hour periods before and after the birth (This does not refer to intrapartum antibiotic prophylaxis)
- Guidance should be sought from SCOTSTAR about ongoing management as baby may require antibiotics and transfer to appropriate neonatal unit.
- The baby requires to have observations performed for 24 hours. Respiratory rate, temperature and heart rate must be performed at 1 hour old, then 2 hourly for 12 hours, then 4 hourly up to 24 hours of age.

Appendix 2 – Flowchart