Norfolk and Norwich University Hospitals NHS Foundation Trust

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Joint Clinical Guideline for: Group B Streptococcus in Pregnancy

For use in:	Maternity
By:	All Staff
For:	Women
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Compliance links: *(is there any NICE related to guidance)*	RCOG Prevention of Early-onset Neonatal Group B Streptococcal Disease. Green-top Guideline No. 36. BJOG 2017
If Yes - does the strategy/policy deviate from the recommendations of NICE? If so why?	No Deviation

This guideline has been approved by the Trust's Clinical Guidelines Assessment Panel as an aid to the diagnosis and management of relevant patients and clinical circumstances. Not every patient or situation fits neatly into a standard guideline scenario and the guideline must be interpreted and applied in practice in the light of prevailing clinical circumstances, the diagnostic and treatment options available and the professional judgement, knowledge and expertise of relevant clinicians. It is advised that the rationale for any departure from relevant guidance should be documented in the patient's case notes.

The Trust's guidelines are made publicly available as part of the collective endeavour to continuously improve the quality of healthcare through sharing medical experience and knowledge. The Trust accepts no responsibility for any misunderstanding or misapplication of this document.

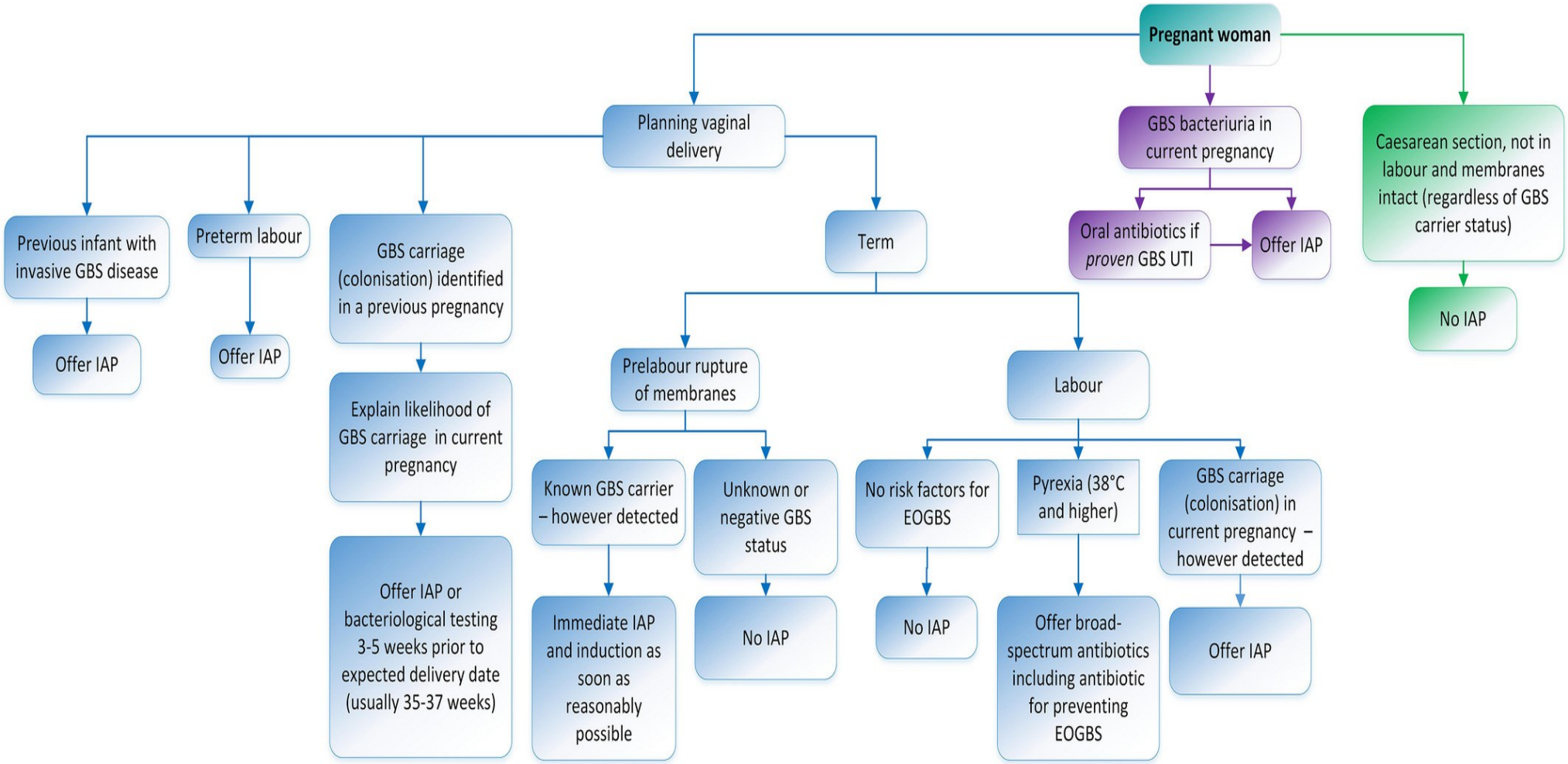
Version and Document Control:

Version Number	Date of Update	Change Description	Author
6.4	16/12/2021	Minor changes	Clare Astbury

This is a Controlled Document

Printed copies of this document may not be up to date. Please check the hospital intranet for the latest version and destroy all previous versions.

Quick Reference



Background

Introduction and background epidemiology

Group B Streptococcus (GBS) is recognised as the most frequent cause of severe early-onset (<7 days age) infection in newborn infants.

GBS is present in 20-40% of adults (so called 'colonisation'), with highest rate in people of black African ancestry and lowest in people of South Asian ancestry. Spread is trans-perineal so that rectal and low vaginal swabs have a higher yield than high vaginal and cervical swab. It is also found in urine in case of GBS bacteriuria, which is associated with a higher risk of neonatal disease. When detected antenatally up to 50% of pregnant carriers may be culture negative at the time of labour.

The incidence of early-onset GBS in the UK and the Republic of Ireland is 0.57/1000 births, which is equivalent to approximately 517 babies per annum. However, in the presence of one or more of the major risk factors below the risk is increased substantially, and may be as high as 40 per 1000.

- Preterm birth (before 37 weeks).
- Prolonged rupture of the membranes.
- Pyrexia.
- Suspected maternal intrapartum infection, including suspected chorioamnionitis.
- GBS found in current pregnancy on vaginal swabs or in the urine.
- Previous baby with GBS disease.

Approximately 60% of UK early-onset GBS cases have one or more of the above risk factors.

Of those neonates affected, approximately two-thirds will present within 7 days of birth (early onset disease), while the remaining one-third present after the first week (late onset disease). The overall mortality rate is 9.4% (6% term, 18% preterm).

Bacteriological screening

Universal bacteriological antenatal GBS screening is NOT recommended.
If a woman has been GBS positive in a PREVIOUS pregnancy, offer bacteriological testing at 35-37 weeks or 3-5 weeks prior to anticipated delivery date if earlier. This should be in the form of a lower vaginal AND anorectal swab. This can be done at their community midwifery appointment at 36 weeks. These women can also be given empirical treatment for GBS instead of screening – see "Whom to treat" section.

Whom to treat

- **Women with a previous baby with early or late onset GBS disease.**
- **ALL women in confirmed pre-term labour (less than 37 weeks).**

Risk of GBS disease in preterm deliveries is 2.3 per 1000. Mortality rate from infection is increased (20-30% vs 2-3% at term).

Antibiotics to start when active labour is confirmed (i.e. >4cm dilated) and not when only suspecting preterm labour.

- **Women with positive GBS bacteriology in CURRENT pregnancy.**

No **antenatal** antibiotic treatment is necessary for asymptomatic women who are identified as GBS carriers on vaginal swabs taken during the pregnancy (See "Intrapartum Care" section for treatment in labour). A positive antenatal MSU should be treated, irrespective of any symptoms. The treatment should include Amoxicillin 500 milligrams TDS for 7 days (unless allergy).

- **GBS positive bacteriology in PREVIOUS pregnancy.**

Likelihood of maternal GBS carriage in this pregnancy is 50%. Offer options of screening as above **OR** Intrapartum Antibiotic Prophylaxis (IAP).
Inform the woman that risk is 2 – 2.5 times higher than general population of early onset GBS disease in her baby, incidence of 1 affected infant in 700-800 deliveries where the mother had a positive swab in previous pregnancy.

Elective caesarean sections

Women undergoing planned caesarean section in the absence of labour or membrane rupture DO NOT require GBS antibiotic prophylaxis, irrespective of their GBS status, since the risk of neonatal GBS disease is extremely low.

Rupture of Membranes (term and pre-term)

Women known to be colonised with GBS with spontaneous rupture of membranes at term should be offered immediate IAP and induction of labour as soon as reasonably possible.

In women colonised with GBS in this or a previous pregnancy, with preterm rupture of membranes before 34 weeks, the perinatal risks of preterm delivery likely outweigh the benefits unless there are other clinical reasons for delivery. After 34^{+0} weeks it may be beneficial to expedite delivery. This should be a consultant decision.

Intrapartum Care

NO ALLERGY TO PENICILLIN
3g IV Benzylpenicillin stat after onset of labour, followed by 1.5g IV Benzylpenicillin 4hourly until delivery.

ALLERGY TO PENICILLIN – NOT ANAPHYLAXIS
If history suggests an allergy to penicillins, but one that is not severe (i.e. no anaphylaxis, angioedema, respiratory distress or urticaria), then administer Cefuroxime 1.5g IV stat after onset of labour, followed by 750mg IV 8hourly until delivery.

SEVERE PENICILLIN ALERGY
1g IV Vancomycin every 12hours (consult Vancomycin and Teicoplanin in Adults Trustdocs Id: 1192 if patient has renal impairment).

Other situations

If **chorioamnionitis** is suspected, broad spectrum antibiotic therapy, including an agent active against GBS should replace GBS-specific antibiotic prophylaxis (if no penicillin allergy, usually Cefuroxime and Metronidazole) – please see the pyrexia in labour guideline.

Management of Positive swab results

When a history of GBS carriage is elicited in the present pregnancy (positive HVS and/or MSU), or where there has been a previously infected baby it is important that the following steps are taken:

1. Attach a specific "GBS Alert" sticker to the blue obstetric consultation sheet in the multidisciplinary health care record and the maternal hand held notes.
2. Highlight the need for intrapartum antibiotic prophylaxis in the "Special instructions for labour" section of the maternal notes.
3. Ensure that the woman is fully informed, and has the Carriage of Group B Streptococcus information leaflet from the Royal College of Obstetricians and Gynaecologists (https://www.rcog.org.uk/globalassets/documents/patients/patient-information-leaflets/pregnancy/pi-gbs-pregnancy-newborn.pdf).
4. Inform community midwife (and GP if positive urine culture as these women will need immediate oral antibiotics as above).

All positive microbiology results are phoned by the laboratory staff to the area from where the specimen originated (on delivery suite the result is documented in the group B strep result book). It is then the senior midwife's responsibility to ensure appropriate action taken.

Postpartum management

Inform the on-call neonatal SHO.

Term babies who are clinically well at birth and whose mothers received IAP for prevention of Early Onset GBS more than 4 hours before delivery do not require special observation.

Babies of women with known GBS colonisation who received less than 4 hours IAP or who declined IAP should be very closely monitored for 12 hours after birth. Well babies should be evaluated at birth for clinical indicators of neonatal infection and have vital signs checked at 0, 1, 2 hours and then 2 hourly until 12 hours. Early discharge should be discouraged.

Ensure the community midwife and GP are informed on discharge letter and via Medicom.

Audit Standards

All mothers in the agreed criteria should be offered intrapartum antibiotics.

All women in preterm labour should be offered intrapartum antibiotics for GBS.

All women known to be GBS positive with spontaneous membrane rupture at term should be offered immediate IOL.

All mothers with known GBS or parents of a baby with GBS should be given the GBS information leaflet.

The Maternity Services are committed to the philosophy of clinical audit, as part of its Clinical Governance programme. The standards contained in this clinical guideline will be subject to continuous audit, with multidisciplinary review of the audit results at one of the monthly departmental Clinic Governance meetings. The results will also be summarised and a list of recommendations formed into an action plan, with a commitment to re-audit within three years, resources permitting.

References:

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