

## Summary of clinical recommendations:

### GBS-bacteriuria or GBS in vaginal swabs during pregnancy

Asymptomatic bacteriuria with Group B Streptococci (GBS) is defined as the occurrence of $\geq 10^4$ CFU/ml in 2 cultures taken 24 hours apart	B
Asymptomatic bacteriuria with GBS is recommended to be treated at the time of diagnosis	C
UTI with GBS is defined as the occurrence of $\geq 10^4$ CFU/ml together with symptoms of UTI	B
The indication for Intrapartum Antibiotic Prophylaxis (IAP) will depend on the examination and treatment regime chosen (see below), when symptomatic or asymptomatic GBS bacteriuria has been found during the current pregnancy.	D
The recommended antibiotic regime in <b>asymptomatic</b> GBS bacteriuria as well as <b>symptomatic</b> GBS UTI 1. Tbl Phenoxymethylpenicillin 1 MIE x 3 for 7 days 2. In case of allergy to penicillin: Tbl Nitrofurantoin 50 mg x 3 for 7 days	A
It is not recommended to do a control culture of the urine after treatment for <b>asymptomatic</b> GBS bacteriuria as well as <b>symptomatic</b> GBS UTI	C
If the pregnant woman present with symptoms of UTI again, a culture of the urine is recommended	√
If the pregnant woman has been treated for pyelonephritis due to GBS or other bacteria, a control culture of the urine is recommended approximately one week after end of treatment	B
Random find of GBS in a vaginal swab from the vagina or the cervix during pregnancy should not be treated	C

### Intrapartum antibiotic prophylaxis (IAP)

General screening for GBS antepartum or intrapartum is not recommended	D
IAP is recommended to women, colonized with GBS at the time of birth, as it reduces the vertical transmission of GBS to the child and reduce the incidence of early onset neonatal GBS disease.	A
IAP is <b>always</b> given to women, who, in a prior pregnancy, gave birth to a child with invasive GBS infection or where GBS infection was suspected.	D
IAP is <b>always</b> given to women in preterm birth before week 35+0.	D
Antibiotic prophylaxis for GBS is not indicated in elective cesarean section, when the woman is not in labor and the fetal membranes are intact	C
The recommended antibiotic regime for intrapartum GBS prophylaxis (IAP) 1. Penicillin 5 MIE (3 g) i.v at first and 2,5 MIE (1,5 g) every 4. hour until delivery.	

	A
2. In case of allergy to penicillin: Cefuroxim 1,5 g every 8. Hour	A
3. In case of verified type 1 allergy to penicillin: Vancomycin 1200mg every 12. hour Alternatively Clindamycin 600 mg i.v. every 8. hour. The daily dosage of clindamycin must not exceed 1800 mg.	C
Dosage of antibiotics in women with pre pregnancy BMI > 30: The distribution volume of antibiotics in pregnancy is not well documented, and the dosage from prepregnancy BMI is encumbered with factors of uncertainty. As the IAP is for prophylaxis and is given in a high concentration, an increased dosage for women with high pre pregnancy BMI is not recommended.	

**Examination and treatment regime during delivery. The guideline group recommend one of two regimes:**

<b>1. No intrapartum screening – intrapartum antibiotics to women given birth who have one of the following risk factors</b> <ul style="list-style-type: none"> <li>Has been treated for GBS urinary tract infection during the current pregnancy</li> <li>Gestational age at delivery (GA) &lt; 37 weeks</li> <li>Rupture of membranes <math>\geq</math> 18 timer</li> </ul>	D
Women who have been treated for GBS urinary tract infection during the current pregnancy, should be treated with IAP independently of CFU of GBS in the urine,, if intrapartum PCR test is not used,	D
<b>2. Intrapartum screening with PCR of woman with risk factors as mentioned below - intrapartum antibiotics if GBS positive by PCR</b> <ul style="list-style-type: none"> <li>Has been treated for GBS urinary tract infection during the current pregnancy</li> <li>Gestational age at delivery 35+0 weeks to 36+6 weeks</li> <li>Rupture of membranes <math>\geq</math> 18 timer (The PCR test can be performed after 14-17 hours, then the answer of the PCR test will be present before 18 hours has passed)</li> </ul>	D
<b>If the is a temperature &gt;38.0 and/or there is a suspicion of clinical intrauterine infection (clinical chorioamnionitis) we recommend to follow the guideline from DSOG (“Fever during delivery” from 2018)</b>	

**PCR intrapartum GBS test**

Intrapartum PCR test for GBS is recommended to the following women <ul style="list-style-type: none"> <li>Women given birth with rupture of membranes <math>\geq</math> 18 timer (The PCR test can be performed after 14-17 hours, then the answer of the PCR test will be present before 18 hours has passed)</li> <li>Women given birth with a gestational age of 35+0 weeks to 36+6 weeks.</li> </ul>	D
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The PCR test is performed when the woman arrives at the labor ward.	
Intrapartum PCR test for GBS can be offered to women, who have been treated for GBS urinary tract infection during the current pregnancy. The PCR test is performed when the woman arrives at the labor ward.	D
If the test result is GBS positive or if there is an invalid answer IAP is recommended	A
If the test result is GBS positive or if there is an invalid answer out patient delivery regime is not recommended, as the child should be observed post partum.	A

### **Observation of the child post partum**

<b>If the baby has clinical infection or if there has been signs of amnionitis: call a pediatrician</b>	A
If the mother is GBS positive during pregnancy or is in one of the risk groups and a PCR test for GBS has not been performed intrapartum <b>AND</b> The mother has received IAP $\geq 4$ hours before delivery the child should be observed at the post natal ward $\geq 48$ hours *  * If the child is GA $\geq 37$ and other criteria for discharge is fulfilled, discharge for further observation at home may be considered after 24 hours. It is important that the parents fully understand, what they should observe with the child at home.	B
If the mother is GBS positive during pregnancy or is in one of the risk groups <b>AND</b> The mother has received IAP $< 4$ hours before delivery <b>AND</b> GA $\geq 37$ <b>AND</b> rupture of membranes $< 18$ hours: observation $\geq 48$ hours**	B
** If the GA $\geq 37$ and rupture of membranes $\geq 18$ hours is the only risk factor for GBS infection and the intrapartum GBS PCR is negative: the woman can deliver and be handled at an out patient basis	
If the mother is GBS positive during pregnancy or is in one of the risk groups <b>AND</b> The mother has received IAP $< 4$ hours before delivery <b>AND</b> GA $< 37$ *** OR rupture of the membranes $\geq 18$ hours: The child is admitted for blood test and observation $\geq 48$ hours**	B

\*\* If the GA  $\geq 37$  and rupture of membranes  $\geq 18$  hours is the only risk factor for GBS infection and the intrapartal GBS PCR is negative: the woman can deliver and be handled at an out patient basis

\*\*\* If the GA is 35+0 weeks to 36+6 weeks and the intrapartal GBS PCR is negative: The child can be admitted to observation at the post natal ward and blood samples can be omitted.

### **Vaccination**

At present there is no approved GBS-vaccine for use in Denmark.

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