# Prevention of Perinatal Group B Streptococcal Infection

## Definition

Early onset of neonatal Group B streptococcal (GBS) infection is still a leading cause of infectious mortality and morbidity among newborns. Between 10-30% of pregnant women are colonized with GBS in the vagina or rectum and could transmit the infection during labor and delivery. This protocol defines the women who need testing in order to identify those who will need antibiotic treatment in labor to prevent neonatal infection.

## Subjective

Must include gestational age 35-37 weeks unless:

1. History of newborn with early onset GBS infection.
2. Urine infection with GBS during current pregnancy.

May include:

1. Dysuria, frequency.
2. No symptoms.
3. Penicillin allergy.

## Objective

Urine infection with GBS during current pregnancy.

## Laboratory

Must include: see Plan.

May include:

1. Urine for culture and sensitivity for symptomatic women.
2. Urine infection with GBS during this pregnancy.

## Assessment

Prenatal patient at risk for GBS colonization/infection.

## Plan

1. Women with GBS diagnosed by urine culture in this pregnancy do not need to be routinely screened at 35-37 weeks.
   a. Treat positive culture urine specimen according to reported antibiotic sensitivity.
   b. Document GBS infection prominently on chart.
   c. Counsel patient about need for antibiotic treatment for GBS in labor (See Patient Education).
2. Women who have previously given birth to a neonate with early-onset Group B Streptococcal disease or who had post-partum in Group B streptococcal endometritis do not need to be routinely screened at 35-37 weeks.
   a. Document GBS condition prominently on chart.
   b. Counsel patient about need for antibiotic treatment in labor (See Patient Education).
3. For all other women, collect specimens for GBS culture at 35-37 weeks of gestational age.
   a. Collect specimen using steriswabs.
   b. Swab lower vagina/introitus, then swab rectum (swab must pass through anal sphincter) using same or different swab.
   c. Place swabs into non-nutrient transport medium (Stuart or Ames media with or without chocolate). Store at room temperature and transport on a timely basis to lab for immediate plating. Test sensitivity declines rapidly after 1 day.
   d. Specimen requisitions should state “Specimen is for Group B streptococcal culture”. If patient is at high risk for anaphylactic reaction to penicillin also request “clindamycin and erythromycin susceptibility testing”.
   e. Document GBS culture results prominently in chart.

## Patient Education

1. Advise patient that GBS can cause serious infections in her newborn. Testing is needed to identify women who carry GBS in the birth canal and will need treatment in labor.
2. A GBS-colonized woman should understand that the most effective time to treat her is when she ruptures her membranes (ROM) or goes into labor. Earlier treatment is not as effective at protecting the newborn because she may become recolonized with GBS after she finished her antibiotics before labor. Women who are not only colonized with GBS, but are infected with GBS...
| **PATIENT EDUCATION** | (Continued) | (such as GBS-UTI) need to be treated for their infection promptly and treated again when in labor or with ROM.  
3. Explain that this testing and treatment will significantly reduce the following risks:  
   a. Early onset GBS infection in her newborn.  
   b. Postpartum endometritis (infection of her womb).  
4. Advise that this testing and treatment will not reduce the risk of late-onset GBS infection in the newborn.  
5. Women who are planning on elective C-section should be told they should be tested in case they go into labor or rupture membranes before their scheduled surgery. They will not need antibiotics for GBS if they have their surgery before ROM or labor.  

| **REFER to MD** | 1. Resistant symptomatic infections.  
2. Frequently recurring infections. 