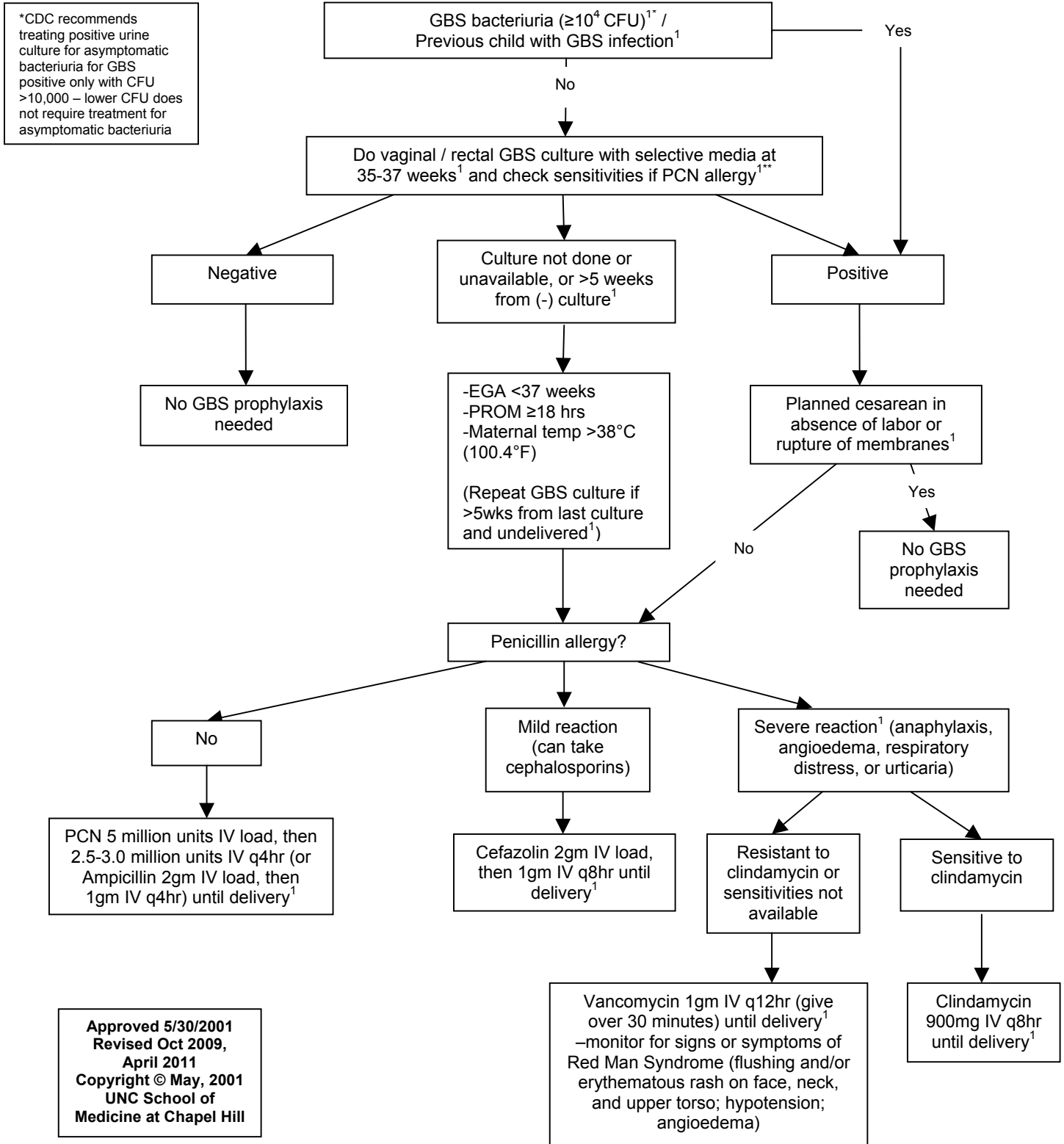


Group B Strep in Pregnancy

GBS Algorithm for Term Pregnancies



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**At UNC, when reported as clindamycin or erythromycin sensitive, the inducible resistance has been tested – please contact the lab at your own institution to determine if inducible resistance testing has been performed.

References

1. Verani JR, McGee L, Schrag SJ. Prevention of perinatal group B streptococcal disease—revised guidelines from CDC, 2010. Division of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC). *MMWR Recomm Rep* 2010;59(RR-10):1–3.

Notes

Laboratories to report GBS in concentrations of greater than or equal to 10⁴ CFU in urine culture specimens (previously, it was GBS “in any concentration”).

Women with symptomatic or asymptomatic GBS urinary tract infection detected during pregnancy should be treated according to current standards of care for urinary tract infection during pregnancy and should receive intrapartum antibiotic prophylaxis to prevent early-onset GBS disease (AIII). (page 14)

Routine screening for asymptomatic bacteriuria is recommended in pregnant women, and laboratories should screen urine culture specimens for the presence of GBS in concentrations of 10⁴ colony-forming units (cfu)/ml or greater. (page 21, Box 4)

Women who have previously given birth to an infant with invasive GBS infection should receive intrapartum chemoprophylaxis; prenatal culture-based screening is not necessary for these women.

All pregnant women should be screened at 35 – 37 weeks’ gestation for vaginal and rectal GBS colonization. Cervical, perianal, perirectal, or perineal specimens are not acceptable, and a speculum should not be used for culture collection.

Laboratories must process GBS cultures correctly using the recommended selective broth media for results to be accurate. Culture specimens should be collected by swabbing the lower vagina (not by speculum examination) and rectum (ie, through the anal sphincter), to maximize the likelihood of GBS recovery. The new guidelines provide expanded recommendations for laboratory methods for the identification of GBS, with the options of using pigmented broth or DNA probe, latex agglutination, or nucleic acid amplification test (NAAT) after incubation for 18–24 hours. However, use of NAAT to detect GBS directly from rectovaginal specimens (ie, without incubation of the specimen for 18–24 hours) has a very limited role.

If the result of the GBS culture is not known at the onset of labor, intrapartum chemo prophylaxis should be administered to women with any of the following risk factors: gestation < 37 weeks, duration of membrane rupture ≥ 18 hours, or a temperature of ≥ 100.4 °F (≥ 38 °C).

Penicillin remains the agent of choice for intrapartum antibiotic prophylaxis. Ampicillin is an acceptable alternative, but penicillin is preferred because it has a narrower spectrum of antimicrobial activity and be less likely to select for resistant organisms.

Among penicillin-allergic women not at high risk for anaphylaxis, cefazolin, because of its narrow spectrum of activity and ability to achieve high intraamniotic concentrations, is the agent of choice for intrapartum prophylaxis.

Patients with a history of any of the following after receiving penicillin or a cephalosporin are considered to be at high risk of anaphylaxis: anaphylaxis, angioedema, respiratory distress, and urticaria.

If a woman is determined to be at high-risk of anaphylaxis, susceptibility testing for clindamycin and erythromycin should be ordered. In view of increasing rates of resistance of GBS to erythromycin (up to 32% or more for invasive isolates), erythromycin is no longer recommended. Group B streptococci may show either inducible or intrinsic

resistance to clindamycin. Inducible resistance is detected by the D-test, which tests the isolate for resistance to both clindamycin and erythromycin. Clindamycin continues to be recommended only if the isolate is susceptible to both clindamycin and erythromycin, or if the isolate is sensitive to clindamycin and the D-zone test result for inducible resistance is negative.

Vancomycin should be reserved for penicillin-allergic women at high risk for beta-lactam anaphylaxis when clindamycin is not an option because of in vitro resistance or unknown susceptibility of a prenatal isolate.

For women not yet screened for GBS, a vaginal and rectal specimen for GBS culture should be obtained if time permits. If GBS screening culture results from the current pregnancy are not available and if onset of labor or rupture of membranes occurs before 37 weeks' gestation with a substantial risk for preterm delivery (as assessed by the woman's health-care provider), intrapartum antibiotic prophylaxis for GBS should be provided pending culture results.

If a negative culture result within the preceding 5 weeks is on record, or if the clinician determines that labor can be successfully arrested and preterm delivery averted, antibiotics for GBS prophylaxis should not be initiated.

Regardless of management strategy chosen, these women should also receive intrapartum antibiotic chemoprophylaxis for GBS when labor likely to proceed to delivery occurs or recurs.

A negative GBS screen is considered valid for 5 weeks. If a patient with a history of PTL is re-admitted with signs and symptoms of PTL and had a negative GBS screen >5 weeks prior, she should be rescreened and managed according to this algorithm at that time.

Revised April 19, 2011.

Notification to Users

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

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