July 2005

Dear Physicians, Nurses, Midwives and Laboratory Staff:

As you know, there has been much discussion about the best approach to preventing neonatal Group B Streptococcal (GBS) infection. While there is still controversy about this issue, both the U.S. Centers for Disease Control (CDC) and the Society of Obstetricians & Gynaecologists of Canada (SOGC) now recommend universal screening at 35-37 weeks gestation and treatment based on culture results or risk factors if the culture results are not known. As part of RCP's role in working with health professionals to implement clinical guidelines, we have been discussing the 2004 SOGC guidelines with primary care providers during RCP visits around the province. This winter we also worked with Dr. Tim Mailman and Mr. George Nelson from the IWK Health Centre to gather information about the logistical challenges facing lab staff receiving GBS screening specimens. Thank you to all of the care providers who shared comments with us and to the lab personnel for participating in the Reproductive Care Program of Nova Scotia Group B Streptococcus Survey. Based on the information received, we want to share the following comments and recommendations.

- In 1994, the SOGC, in collaboration with the Canadian Pediatric Society (CPS) recommended two approaches to GBS prophylaxis: 1) universal screening and intrapartum treatment of women with a positive culture, **or** 2) intrapartum treatment based on risk factors for neonatal GBS infection.
- In 2002, CDC released guidelines recommending routine screening at 35-37 weeks gestation. Many clinicians in Nova Scotia adopted this practice although the available Canadian guidelines still supported two possible options.
- In 2002, the Canadian Periodic Task Force on Preventive Health Care also released recommendations for GBS prophylaxis and there was a commentary in the CPS Pediatric Infectious Disease Notes calling for a multidisciplinary conference to develop new Canadian recommendations.

- In 2004, the SOGC Infectious Diseases Committee released a new guideline recommending that all women be offered screening for GBS with a vaginal-rectal swab at 35-37 weeks gestation. The treatment recommendations differ slightly from those recommended by the CDC and the Canadian Periodic Task Force on Preventive Health Care. Both the CDC and the SOGC recommendations emphasized proper specimen collection and handling. The RCP supports the SOGC guidelines.
- It is important for clinicians to have a clear understanding of the women who should receive intrapartum chemoprophylaxis and those who should not receive treatment in labour, according to the SOGC guidelines. **Women with a negative GBS culture result within 5 weeks and no history of GBS infection do not need intrapartum prophylaxis, unless they develop fever in labour.**
- Across Nova Scotia GBS specimen handling seems quite consistent and in keeping with established recommendations.
- Some labs reject or comment on inappropriate specimens (e.g. those that are > 48 hours old or those collected or labeled inappropriately as to the source). Other labs accept all specimens and return the results without comment. We recognize that lab staff cannot be sure if the specimens were collected improperly or mislabeled as to the type of specimen. Labs do not require clinical information so cannot comment about whether swabs were done at the recommended gestational age.

Recommendations for primary care providers:

- Women who agree to screening for GBS should have a culture done from a single swab first to the vagina then to the rectal area. This culture should be taken between 35-37 weeks gestation.
- The swab should be labeled as a vaginal-rectal swab for GBS. It should be transported to the lab at room temperature in a non-nutritive transport medium and arrive, ideally, within 48 hours of collection. In rural areas, this may mean scheduling prenatal appointments based on the lab transport schedule, if at all possible.
- If the woman has a known allergy to penicillin, SOGC recommends noting this on the requisition and requesting sensitivity testing for clindamycin and erythromicin.
- Since GBS colonization status can change, the SOGC recommends repeating the GBS culture after 5 weeks. Some clinicians may decide to delay collecting the GBS swab to 36 weeks so that the results will be valid until 41 weeks gestation. **If a woman goes into labour and her culture result is > 5 weeks old, her GBS status should be considered unknown.**

Recommendations for laboratory staff:

- Laboratory reports for GBS screening should contain a comment field to indicate any problems with a specimen. If possible, the comment field should indicate the specific problem, e.g. 'GBS screening requires a vaginal-rectal swab and proper labeling', 'GBS swabs should arrive at the lab within 48 hours of collection'.
- Lab staff should check the appropriate comment field whether or not the specimen is rejected.
- Incubation times for GBS cultures vary around the province. GBS swabs should be first inoculated to a selective broth (e.g. Todd-Hewitt) for 18-24 hours before being subcultured to sheep blood agar for 24-48 hours. Other selective broth (e.g. carrot) or agar (e.g. Granada) should be used only if shown to be equally sensitive. You may wish to reevaluate your practices locally.

If you have any questions or comments, please contact the RCP office at:

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