

STREPTOCOCCUS GROUPS A, C and G: COLONISATION OR INFECTION – MANAGEMENT OF PREGNANT/POSTPARTUM WOMAN

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Reduce transmission and risk of maternal puerperal sepsis due to group A streptococcus (GAS), group C streptococcus and/or group G streptococcus
- Appropriate management of pregnant/postpartum woman known to be colonised with or have infection from GAS, groups C and/or G streptococci

2. PATIENT

- Pregnant/postpartum woman

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Nil

5. CLINICAL PRACTICE

Antenatal

- Review results of midstream urine (MSU), high vaginal swab (HVS) or low vaginal swab (LVS) collected in antenatal setting. If a streptococcal isolate is present, the hospital laboratory will report the isolate, and the streptococcal group to which it belongs. Any external pathology provider may need to be contacted to clarify this information, if it is not stated
- Treat woman, even if asymptomatic, who has a positive result for *Streptococcus pyogenes* (group A streptococcus) and *Streptococcus dysgalactiae* (group C/G streptococcus) with oral antibiotics as soon as the result is known:
 - amoxicillin 500mg orally 8 hourly for 5 days
 - if allergic to penicillin, treatment should be individualised according to the allergy and antibiotic susceptibility of the organism e.g. clindamycin 300mg orally 8 hourly for 5 days
- Do not treat asymptomatic woman with *Streptococcus milleri* group (*Streptococcus anginosus*, *Streptococcus intermedius*, *Streptococcus constellatus*) positive on HVS or LVS as this constitutes normal vaginal flora. This should only be treated if there is clinical evidence of chorioamnionitis or puerperal sepsis, or with preterm rupture of membranes. It is highly unusual to be found in a MSU, but, if positive, should be treated according to antibiotic susceptibility
- Document in antenatal record and antenatal card

Intrapartum

- Give woman who has had a positive result for group A, C, and/or G streptococci on MSU, HVS or LVS during pregnancy, intrapartum prophylaxis, even if she has received antenatal treatment:
 - benzylpenicillin 1.2g intravenously (IV) immediately and then 600 mg IV 6 hourly until birth
 - if penicillin allergic, use clindamycin 600 mg IV 8 hourly until birth

Postpartum

- Monitor for signs and symptoms of sepsis and escalate as per Standard Maternity Observation Chart (SMOC) for woman who has received appropriate intrapartum prophylaxis

CLINICAL POLICIES, PROCEDURES & GUIDELINES

Approved by Quality & Patient Care Committee
19 April 2018

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- Perform 24 hours of fourth-hourly observations if woman did not receive appropriate intrapartum prophylaxis
- Request prompt medical assessment if any signs or symptoms of infection, including collection of new vaginal swab
- Recognise sepsis and manage as per sepsis pathway
- Treat mild infections/asymptomatic woman with group A, C and/or G colonisation detected postpartum, with oral antibiotics as these isolates can cause necrotizing fasciitis and/or puerperal sepsis even if the woman is clinically well
- Continue monitoring for ongoing signs and symptoms of sepsis
- Provide routine care for neonate. Do not follow Neonatal Group B Streptococcus LOP.
- Advise paediatric team when woman has had a positive result for group A, C or G strep in the postpartum period

6. DOCUMENTATION

- Medical record
- eMeds
- SMOC chart
- Antenatal card

7. EDUCATIONAL NOTES

- Vaginal and rectal colonisation with groups A, C and G streptococci is 0.03%, compared with 20.1% for group B streptococcus, therefore routine antenatal screening is not required at this time. However, whilst groups A, C and G streptococci prevalence had decreased during the last century (due to improved hygiene practices) an increasing trend is emerging
- Groups A, C and G streptococci may be associated with increased risk of maternal mortality
- Groups A, C and G streptococci may be disseminated by colonised asymptomatic healthcare workers
- Good hand hygiene practice assists in preventing spread of groups A, C and G streptococci
- Incidence of neonatal sepsis after isolation of groups A, C and G streptococci in mother is not known
- The postpartum woman is particularly vulnerable for groups A, C and G streptococci, as mucosal and cutaneous damage may occur during delivery. Puerperal sepsis may result from infection
- Symptoms/complications may occur 2-14 days postpartum and may include:
 - Fever > 38 degrees
 - Tender non-involuted uterus
 - Purulent and foul smelling lochia
 - Vaginal bleeding, in excess of that anticipated postpartum
 - Flu-like symptoms
 - Confusion
 - Dizziness
 - Rash – rare (10% of cases)
 - Sepsis – multi organ failure
 - Necrotising fasciitis
 - Glomerular nephritis
 - Rheumatic fever

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- NSW Health, 2016, *Maternal sepsis due to Group A Streptococcus – Information for Clinicians*. Factsheet.
http://www.health.nsw.gov.au/factsheets/infectious/maternal_sepsis.html
- Antimicrobial Guideline (Obstetrics)

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**STREPTOCOCCUS GROUPS A, C and G: COLONISATION OR INFECTION –
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- Group B streptococcus (GBS) screening and prophylaxis
- Sepsis in Pregnancy and Postpartum Period
- Vaginal swab – High
- Observations for Postnatal Woman

9. RISK RATING

- Medium

10. NATIONAL STANDARD

- CC – Comprehensive Care

11. REFERENCES

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12. RCOG Green-top Guideline No. 64b. Bacterial Sepsis Following Pregnancy. April 2012
13. Saab, Jawad; Bell, Sydney M; Lahra, Monica M. Vaginal carriage rate of streptococcal pyogenes in 1600 pregnant women. Pathology: October 2012 – Volume 44 – Issue 6 – p 567-568.

REVISION & APPROVAL HISTORY

Reviewed and endorsed Obstetrics LOPs group 10/4/18
Previous title : *Group A, C and G Streptococcus (GAS) – Management of Patients*
Approved Quality & Patient Care Committee 7/7/16
Reviewed and endorsed Therapeutic & Drug Utilisation Committee 21/6/16
Approved Quality & Patient Safety Committee 20/2/14
Endorsed Obstetrics LOPs 28/1/14

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