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September 28, 2025

Evaluation and management of chorioamnionitis.

1. Definition or Key Clinical Information (Lukanovic et al., 2023)

Chorioamnionitis is an infection of the chorion, amnion, or both that can occur before or during labor. It is the most common infection during labor and can spread to the placenta, umbilical cord, fetus, and decidua as well. Suspected chorioamnionitis does require a plan for delivery and antibiotics. The incidence is 40-70% in preterm labor or premature rupture of membranes cases. In term delivery, the incidence is 1-3% of intact membranes and 6-10% of ruptured membranes. Chorioamnionitis is often polymicrobial with aerobic and anaerobic bacteria and is most commonly spread through vertical transmission through the genital tract. It can also be spread through invasive procedures such as amniocentesis or chorionic villus sampling or through maternal systemic infection.

2. Assessment

i. Risk Factors (Lukanovic et al., 2023; Tharpe et al., 2021)

- Nulliparity
- Prolonged rupture of membranes or prolonged labor
- Multiple vaginal digital examinations
- Genital tract pathogens: GBS, UTIs, STIs, bacterial vaginosis
- Meconium stained amniotic fluid
- High maternal BMI, immunocompromised status, or periodontal disease
- Tobacco, alcohol, marijuana, other substance abuse

ii. Subjective Symptoms (Lukanovic et al., 2023; Tharpe et al., 2021)

- Feeling unwell, cold or clammy, chills, like their heart is racing or abdominal pain
- May report a foul-smelling vaginal discharge or water breaking

iii. Objective Signs (Lukanovic et al., 2023; Tharpe et al., 2021)

- Maternal fever >100.4, heart rate > 100 bpm, or hypotension (late sign)
- Uterus tender on palpation
- Pelvic exam: foul smell to discharge or purulent discharge, vaginal vault feels hot
- Fetal tachycardia (>160 bpm)

v. Clinical Test Considerations (Tharpe et al., 2021)

- Maternal vitals and FHR with doppler
- Routine labs: CBC and urinalysis at initiation of care, 28, and 36-37 weeks. GBS at 36-37 weeks. This would identify any asymptomatic infections that could lead to chorioamnionitis.
- No other tests are timely for diagnosis

Practice Guideline for chorioamnionitis

Updated Fall 2025

vi. Differential Diagnosis (Lukanovic et al., 2023; Tharpe et al., 2021)

- In the out of hospital setting, fever and tachycardia could be caused by dehydration or overheating
- Maternal fever could also be from other causes such as pyelonephritis, influenza, appendicitis, pneumonia, COVID-19 and other infections

3. Management plan

i. Therapeutic measures to consider within the CPM scope (Lukanovic et al., 2023; Tharpe et al., 2021)

- There are no safe therapeutic measures for suspected chorioamnionitis. In hospital evaluation/induction/delivery is always indicated.

ii. Therapeutic measures commonly used by other practitioners (Lukanovic et al., 2023; Tharpe et al., 2021)

- Induction or cesarean based on clinical indications after antibiotic therapy
- Antibiotic therapy: dictated by region and common pathogens but standards include ampicillin, (cefazolin or clindamycin for penicillin allergies), gentamicin, and/or metronidazole
- Antipyretics for fever reduction

iii. Ongoing care (Jain et al., 2022; Puri et al., 2016; Tharpe et al., 2021)

- Postpartum care once released from hospital. Recommend fermented foods and/or probiotic supplements (for baby as well) to rebuild microbiome. May need additional emotional support to process birth.
- Provide ongoing labor support if possible

iv. Indications for Consult, Collaboration, or Referral (Lukanovic et al., 2023; Tharpe et al., 2021)

- Transfer to hospital for evaluation/delivery if:
    - Development of a fever over 100.4 F in labor that does not resolve with hydration and position changes (2 readings of 100.4 F in 30 minutes or a rising temp)
    - Increased maternal temp or tachycardic FHR that does not respond to hydration or environmental changes in labor
    - Preterm premature rupture of membranes or preterm labor
- If an infection is developed at term, refer to PCP or urgent care for evaluation and treatment

v. Client and family education (Jain et al., 2022; Puri et al., 2016; Tharpe et al., 2021)

- Warning signs requiring immediate communication (foul smelling discharge, rupture of membranes, fever, abdominal pain)
- Counseling on risks associated with genital tract infections (GBS, UTIs, STIs, bacterial vaginosis)
- Education on risks and risk mitigation if premature rupture of membranes
- When chorioamnionitis is suspected, educate on urgency of condition, potential side effects, need for antibiotics (and side effects), and what to expect in the hospital

4. References

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