Supplemental Appendix. Diagnostic and Treatment Guideline for Serious Maternal Infections in LMIC*

Syndrome	Signs & Symptoms Typically Present	Signs & Symptoms Sometimes Present	Diagnosis- Gold Standard	Diagnosis- Other	Treatment	Follow-up
Acute Pyelonephritis	Dysuria Spiking fever/chills Increases frequency and urgency of urination Abdominal pain Costovertebral anle pain	Retropublic/suprapubic pain Loin/pain tenderness Tenderness in ribcage Anorexia Nausea/vomiting	Mid-stream clean-catch urine culture Antibiotic sensitivity testing if possible	Urine dipstick (leukocyte esterase or nitrate reductase) Urine Gram stain	Initiate treatment for shock, if present Start IV infusion, infuse IV fluids at 150 mL/hour Treat with anitbiotic appropriate for organism If urine culture is unavailable treat with ampicillin* 2 g IV every 6 hours plus gentamicin 5 mg/kg body weight IV every 24 hours	Re-evaluate antibiotic regime if no improvement after 72 hours Continue treatment until woman is free of fever for 48 hours, then give amoxicillin 1 g by mouth 3 times/day to complete 14 days of treatment**
Septic Abortion	Foul-smelling vaginal discharge in first 22 weeks Fever Uterine tenderness Cervical motion tenderness	Lower abdominal pain Rebound tenderness Prolonged bleeding Purulent cervical discharge	Relies on clinical signs and symptoms and should be considered in any woman of reproductive age presenting with vaginal bleeding, abdominal pain and fever.	Pelvic exam to visualize vaginal or cervical laceration and visible retained products of conception Positive pregnancy test indicates a current or recent pregnancy	Immediately initiate antibiotic therapy: Ampicillin 2 g IV every 6 hours plus gentamicin 5 mg/kg body weight IV every 24 hours plus metronidazole 500 mg IV every 8 hours Removal of retained products of conception Fluid resuscitation and support therapy as needed to manage septic shock	Continue antibiotic therapy until woman is free of fever for 48 hours
Chorioamnionitis (Intra-amniotic infection)	Fever/chills Foul-smelling watery discharge after 22 weeks Abdominal pain	History of amniotic fluid loss Tender uterus Rapid fetal heart rate Light vaginal bleeding	Amniocentesis followed by culture of the amniotic fluid	Based on clinical signs of inflammation including the presence of maternal fever (>38C) with the presence of 2 other signs including maternal leukocytosis (>15,000 cells/mm3), maternal tachycardia (>100bpm), fetal tachycardia (>160bpm), uterine tenderness and foul smelling/purulent amniotic fluid	Give antibiotics until delivery: Ampicillin 2 g IV every 6 hours plus gentamicin 5 mg/kg body weight every 24 hours Deliver baby as soon as possible: If cervix is favourable, induce labor with oxytocin If cervix is unfavorable, ripen cervix with prostaglandins and infuse oxytocin or perfrm caesarean section	If vaginal delivery occurs discontinue antibiotics, but if c-scetion occurs contibue antibiotics and give metronidazole 500 mg IV every 8 hours unitl feverfree for 48 hours Monitor for development of puerperal sepsis, and if suspected give antibiotics If neonatal sepsis is supected, perform blood culture and give antibiotics

Syndrome	Signs & Symptoms Typically Present	Signs & Symptoms Sometimes Present	Diagnosis- Gold Standard	Diagnosis- Other	Treatment	Follow-up
Puerperal Sepsis/Endometritus	Fever/chills Lower abdominal pain Purulent, foul smelling lochia Tender uterus		Relies on recognition of clinical signs and symptoms including maternal fever (>38C), pain, uterine tenderness, cervical motion tenderness, tachycardia, leukocytosis and unusual or foul smelling discharge	Culture of endometrial cavity may confirm diagnosis of sepsis, but is problematic because cultures obtained transvaginally or transcervically may be contaminated	Ampicillin 2 g IV every 6 hours plus gentamicin 5 mg/kg body weight IV every 24 hours plus metronidazole 500 mg IV every 8	Continue antibiotic therapy until woman is free of fever for 48 hours If no improvement, and signs of general peritonitis are present, perfom laparotomy to drain pus
Cellulitis & Necrotizing Fasciitis	Painful and tender wound Erythema and oedema beyond edge of incision Intense pain Unexplained fever	Reddened area around wound	Relies on recognition of clinical signs and symptoms, especially pain, redness and other signs of inflammation Direct observation of wound site to look for redness, heat or tenderness as well as tissue separation Wound site culture	Imaging studies	deep tissue: Ampicillin 500 mg by mouth 4 times/day for 5 days plus metronidazole 400 mg by mouth 3 times/day for 5 days; if	• For necrotizing fasciitis, once woman is fever free for 48 hours, give ampicillin 500 mg IV 4 times/day for 5 days <i>plus</i> metronidazole 400 mg by mouth 3 times/day for 5 days

^{*}All guidelines taken from IMPAC puiblication: Managing Complications in Pregnancy and Childbirth: A guide for midwives and doctors

^{**} Treatment with penicillins not recommended in high income countries with high prevalence of E. coli resistance. Use 2nd or 3rd genreation cephalosporin

[#] Appropriate surgical debridement is mandatory (average patient requires 3 debridements). Survival with antibiotic therapy alone is rare.