Society for Maternal-Fetal Medicine

Consult Series #71

Management of previable and periviable preterm prelabor rupture of membranes

What are previable and periviable PPROM?

		GESTATIONAL AGE in weeks of gestation
PRETERM PRELABOR RUPTURE OF MEMBRANES (PPROM)	membrane rupture before labor	<37 0/7
PREVIABLE	the period when a fetus would not survive outside the uterus (not a candidate for life-sustaining interventions)	<20 0/7
PERIVIABLE	the period when a fetus may survive outside the uterus with life-sustaining interventions but still with a high risk of death or severe morbidities	20 0/7 - 25 6/7

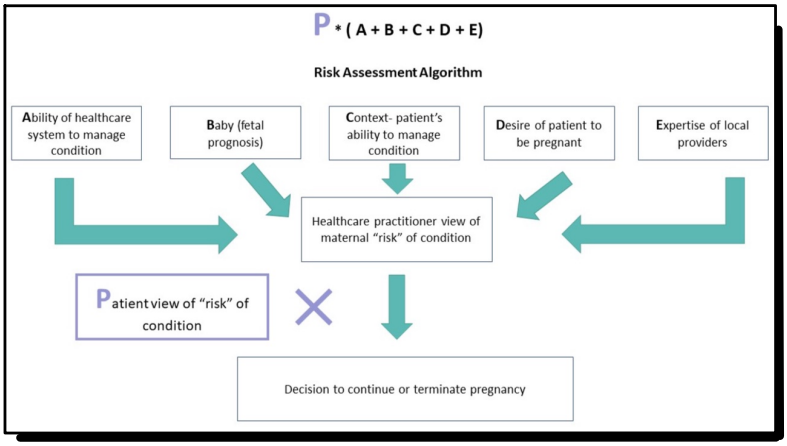
Continuing pregnancy after previable and periviable PPROM incurs

- maternal risk with no direct maternal benefit
- no guarantee of fetal benefit

This document focuses on management when

- a trial of neonatal resuscitation and intensive care are not considered appropriate by the healthcare team
- or not desired by the pregnant patient

What are the management options?



Outcomes after EXPECTANT MANAGEMENT of PPROM at <24 weeks of gestation

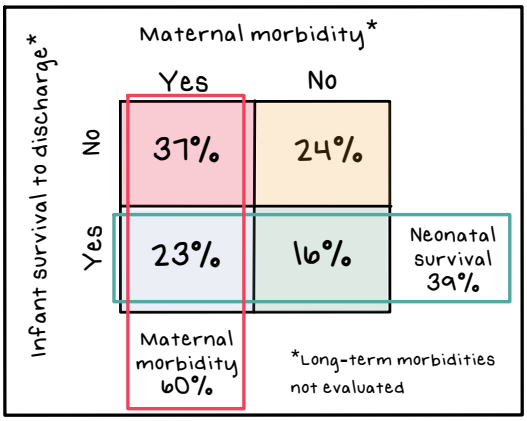


Table 1. Summary of American College of Obstetricians and Society for Maternal-Fetal Medicine guidelines for intervention with threatened periviable birth

	20 0/7 to 21 6/7 weeks	22 0/7 to 22 6/7 weeks	23 0/7 to 23 6/7 weeks	24 0/7 to 24 6/7 weeks	25 0/7 to 25 6/7 weeks
Neonatal assessment for resuscitation	Not recommended 1A	Consider 2B	Consider 2B	Recommended 1B	Recommended 1B
Antenatal corticosteroids	Not recommended 1A	Consider 2C	Consider 2B	Recommended 1B	Recommended 1B
Magnesium sulfate for neuroprotection	Not recommended 1A	Not recommended 1A	Consider 2B	Recommended 1B	Recommended 1B
Antibiotics to prolong latency during expectant management of PPROM	Consider 2C	Consider 2C	Consider 2B	Recommended 1B	Recommended 1B
Intrapartum antibiotics for group B streptococci prophylaxis	Not recommended 1A	Not recommended 1A	Consider 2B	Recommended 1B	Recommended 1B
Cesarean delivery for fetal indication	Not recommended 1A	Not recommended 1A	Consider 2B	Consider 1B	Recommended 1B

Footnote: Adapted from Use of antenatal corticosteroids at 22 weeks of gestation and Obstetric Care Consensus No. 6: Periviable birth

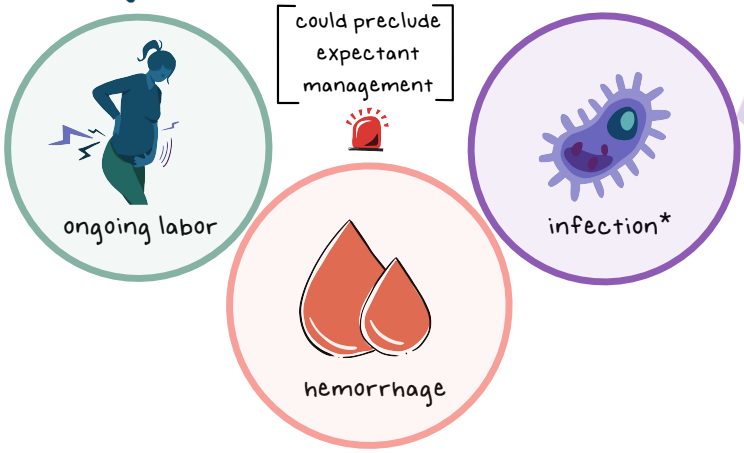
Counseling must reflect ethical commitments to prioritize maternal medical benefit and respect the authority of pregnant patients to accept certain risks to their own health in pursuit of perceived fetal benefit

Consider consultation by a maternal-fetal medicine subspecialist or neonatologist

Consider referral to a tertiary care center

Initial assessment

Assess for signs and symptoms of:



*intraamniotic infection may not initially present with fever

DO NOT DELAY diagnosis and treatment because of the absence of maternal fever

Contraindications to expectant management should prompt abortion care or delivery and evacuation of uterine contents

Counseling

We recommend individualized counseling about

- maternal and fetal risks
- benefits of both abortion care and expectant management

All patients should be offered abortion care

Expectant management can be offered in the absence of contraindications

Reported average latency (time between PPROM and delivery)	7-51 days

Patients have the right to change their mind and should have access to abortion care, if desired, after an initial trial of expectant management

Maternal risks include

- Intraamniotic infection
- Sepsis
- Unplanned operative procedure
- Unplanned hysterectomy
- Hemorrhage of >1000mL
- Admission to intensive care unit
- Acute renal insufficiency
- Venous thromboembolism
- Death

Fetal risks include

- Bronchopulmonary dysplasia
- Chronic pulmonary disease

Pulmonary hypoplasia can result from lack of amniotic fluid during critical fetal lung development

- Skeletal deformities
- Intraventricular hemorrhage
- Necrotizing enterocolitis
- Sepsis
- Retinopathy of prematurity
- Intrauterine demise
- Neonatal demise

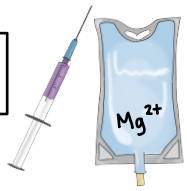
Antepartum interventions

ANTIBIOTICS

weeks of gestation at time of PPROM	
≥ 24 0/7	We recommend antibiotics for pregnant individuals who choose expectant management after PPROM
20 0/7 - 23 6/7	Antibiotics can be considered after PPROM

It is reasonable to follow similar recommendations for antibiotic regimen and duration of treatment as for PPROM at later gestational ages

ANTENATAL CORTICOSTEROIDS & MAGNESIUM



Administration of antenatal corticosteroids and magnesium are not recommended until the time when a trial of neonatal resuscitation and intensive care would be considered appropriate by the healthcare team and desired by the patient

DISPOSITION

HOSPITAL

It is reasonable to be observed in the hospital to ensure stability prior to discharge home

HOME

Before discharge, provide detailed instructions about the signs and symptoms to monitor

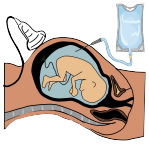
ie daily temperature monitoring, contractions, vaginal bleeding, discolored or malodorous vaginal discharge, abdominal pain

OFFICE

It is common for patients to be seen frequently for close monitoring

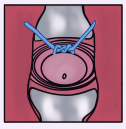
If contraindications to expectant management develop or after reaching a point when a trial of neonatal resuscitation would be considered appropriate, hospital readmission should occur

SERIAL AMNIOINFUSIONS



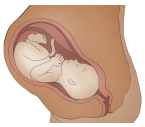
Not recommended for routine care of previable and periviable PPROM

CERCLAGE



Cerclage management is similar to cerclage management after PPROM at later gestational ages; reasonable to either remove or leave it in situ after shared decision-making

SUBSEQUENT PREGNANCIES



We recommend following guidelines for management of pregnant persons with a prior spontaneous preterm birth