CONDITION

Preterm labor

Preterm labor is labor that begins before 37 completed weeks of pregnancy.

WHAT IT IS
Labor beginning before 37 completed weeks of pregnancy

BODY SYSTEM
Pregnancy and reproductive system

MAIN SYMPTOMS
Regular contractions, pelvic pressure, backache, fluid leakage

WHAT CAUSES IT
Often unknown; infection, bleeding, or early membrane rupture

HOW IT IS DIAGNOSED
Contraction monitoring and cervical change on pelvic examination

MAIN TREATMENT
Medicines to protect the baby and briefly delay birth

CAN IT BE CURED?
Sometimes - contractions stop, but they may return

IS IT AN EMERGENCY?
Sometimes - heavy bleeding, severe pain, or cord visible

LONG-TERM OUTLOOK
Many pregnancies continue; earlier birth brings greater newborn risks

Overview

Preterm labor means labor that begins before 37 completed weeks of pregnancy. Labor involves regular contractions that cause the cervix-the opening to the uterus-to thin out or open.

Contractions alone do not always mean you are in labor. Many people have practice contractions, sometimes called Braxton Hicks contractions. These usually do not cause continuing changes to the cervix. The term "threatened preterm labor" may be used when symptoms are present but labor has not been confirmed.

Preterm labor matters because it can lead to preterm birth. Babies born early have had less time for their lungs, brain, digestive system, and other organs to develop. The chance and type of complications are strongly linked to how early the baby is born. Even a short delay may allow time for treatments that support the baby or for transfer to a hospital with specialist newborn

care.

Preterm labor does not always end in an early birth. Contractions may settle, and the pregnancy may continue for days, weeks, or sometimes until full term.

Symptoms

Symptoms can be mild or difficult to separate from common pregnancy discomforts. Before 37 weeks, contact your maternity unit promptly if you develop:

Fluid from the vagina may mean that the amniotic sac-the fluid-filled membrane around the baby-has broken early. This is called preterm prelabor rupture of membranes, or PPROM.

Some people have cervical changes with little pain. Do not wait for contractions to become severe before seeking advice. A maternity assessment is the only reliable way to tell whether the symptoms represent preterm labor.

- Regular or frequent tightening of the abdomen
- Menstrual-like cramps or pelvic pressure
- A constant, dull lower backache
- A change in vaginal discharge, especially watery, bloody, or mucus-like discharge
- A gush or ongoing trickle of fluid from the vagina
- Abdominal cramps, with or without diarrhea

Causes and risk factors

Preterm labor often has no single identifiable cause. It may result from several processes that cause contractions, weaken the membranes, or make the cervix open early.

Possible causes or triggers include infection or inflammation, bleeding behind the placenta, early rupture of the amniotic sac, and stretching of the uterus during a pregnancy with twins or other multiples. Problems with the cervix or the shape of the uterus may also contribute.

Factors linked with a higher chance of preterm labor or birth include:

Having a risk factor does not mean preterm labor will happen. It can also occur in people with no known risk factors. It is not usually caused by something you did.

- A previous spontaneous preterm birth
- A short cervix during pregnancy

- Pregnancy with twins or higher-order multiples
- Vaginal bleeding during pregnancy
- Smoking or use of some recreational drugs
- Certain uterine, cervical, placental, or fetal conditions
- Becoming pregnant soon after a previous birth
- Some infections and long-term health conditions

Diagnosis

Assessment usually starts with questions about your contractions, discharge, bleeding, and possible fluid leakage. The care team will check how many weeks pregnant you are and review any previous pregnancy complications.

Your abdomen may be examined, and monitors may record contractions and the baby's heartbeat. A speculum examination uses an instrument to gently open the vagina so the cervix and any leaking fluid can be seen.

A pelvic examination may be used to check whether the cervix is thinning or opening. More than one examination may be needed because labor is confirmed by cervical change over time. Digital examinations may be limited if the membranes have broken because repeated examinations can increase infection risk.

A transvaginal ultrasound may measure cervical length. A longer cervix makes birth in the near future less likely, while a very short cervix can support concern about early birth. Ultrasound results do not confirm labor by themselves.

A vaginal swab for fetal fibronectin may sometimes be offered. Fetal fibronectin is a protein found where the amniotic sac meets the uterus. A negative result can help show that birth soon is less likely. A positive result does not prove that birth is about to happen.

Urine, blood, or vaginal tests may be used to look for infection. If fluid leakage is suspected, an examination or fluid test can help determine whether the amniotic sac has broken.

Treatment and management

Treatment depends on how far the pregnancy has progressed, whether the cervix is changing, whether the membranes have broken, and how you and the baby are doing. The safest plan may be observation, an attempt to delay birth, or delivery.

If early birth appears possible, corticosteroid medicines may be given to help the baby's lungs and other organs mature. Their use depends on the stage of pregnancy and the likelihood of birth within the treatment window.

Medicines called tocolytics can sometimes slow contractions for a short period. They do not permanently prevent preterm birth. A brief delay may provide time for corticosteroids like prednisone or hydrocortisone to work or for transfer to a hospital with an appropriate neonatal unit. Tocolytics are not suitable in every situation, such as when delivery is safer because of infection, significant bleeding, or concerns about the baby.

Magnesium sulfate may be offered when birth at an early gestational age appears likely. In this setting, it is used to reduce the risk of certain neurological problems in the baby, not as a routine long-term treatment for contractions.

Antibiotics like amoxicillin or doxycycline are used when there is a specific reason, such as PPROM, a diagnosed infection, or prevention of group B streptococcal infection during birth. They are not routinely used simply to stop preterm labor when the membranes are intact.

If labor continues, the care team will discuss the safest way to give birth. Preterm labor does not automatically require a cesarean birth. The decision depends on factors such as the baby's position, fetal monitoring, placental problems, and how labor progresses.

Complications

The main complication is preterm birth. The earlier a baby is born, the more likely they are to need specialist support. Possible short-term problems include difficulty breathing, feeding, controlling body temperature, and maintaining blood sugar. Premature babies are also more vulnerable to jaundice, infection, and problems affecting the brain, eyes, or intestines.

Some babies born early have longer-term difficulties with movement, learning, hearing, vision, behavior, or lung health. Many do well, particularly those born closer to 37 weeks, but no individual outcome can be predicted from gestational age alone.

For the pregnant person, complications may relate to the cause of labor rather than the contractions themselves. Examples include infection after the membranes break, placental bleeding, or the need for an urgent birth. Hospital admission, separation from home, and uncertainty about the baby can also be emotionally difficult.

Prevention

Preterm labor cannot always be prevented. This is especially true when there is no clear cause.

Routine prenatal care can identify some concerns early. Avoiding smoking and recreational drugs may reduce risk. If you are planning another pregnancy after a preterm birth, a pre-pregnancy review can help address health conditions, medicines, and pregnancy spacing.

People with a previous spontaneous preterm birth or certain cervical findings may be offered closer monitoring. Transvaginal ultrasound can be used to check cervical length. Depending on your history and results, preventive treatment may include vaginal progesterone or a cervical stitch called a cerclage. These treatments are used only in selected circumstances.

Routine bed rest has not been shown to prevent preterm birth and can cause harms, including blood clots, muscle loss, and emotional strain. Follow any specific activity advice given after assessment, but do not assume you need to stay in bed.

Living with it and what to expect

After an episode of suspected preterm labor, you may be observed for several hours or admitted to hospital. If the cervix does not continue to change and you and the baby are well, you may be able to go home with instructions about returning if symptoms recur.

Contractions may stop completely or continue from time to time without leading to immediate birth. In other cases, labor progresses despite treatment. It is usually not possible to predict the exact timing.

Your follow-up may involve additional prenatal visits, cervical checks, ultrasound scans, or fetal monitoring. Advice about work, travel, exercise, and sexual activity should reflect your symptoms, pregnancy stage, and test results. Broad restrictions are not helpful for everyone.

If the baby is born early, the length of hospital care can range from brief observation to a longer neonatal stay. Support may focus on breathing, warmth, feeding, and growth. The neonatal team can explain what is expected for your baby's gestational age and health.

A previous spontaneous preterm birth increases the chance of another, but it does not mean every future baby will be born early. Early review in a later pregnancy can help plan monitoring and any appropriate preventive care.

When to get medical help

Before 37 weeks, contact your maternity unit or obstetric service urgently if you have regular contractions, period-like cramps, new pelvic pressure, a persistent backache, vaginal bleeding, or watery fluid leaking from the vagina. Also seek prompt assessment if your baby is moving less than usual.

Do not wait for your next routine appointment. These symptoms may have causes other than labor, but they need assessment.

Call emergency services if you have:

If a cord is visible or felt, do not push it back inside. Call emergency services, avoid eating or drinking, and follow the dispatcher's instructions.

- Heavy vaginal bleeding
- Severe or constant abdominal pain
- An urge to push or a feeling that birth is happening
- An umbilical cord or part of the baby visible at the vagina
- Fainting, severe weakness, or difficulty breathing

Common questions

Can preterm labor stop on its own?

Yes. Contractions sometimes settle without causing further cervical change. Treatment may also delay labor. Symptoms can return, so follow the return instructions given after your assessment.

How can I tell preterm labor from Braxton Hicks contractions?

Braxton Hicks contractions are often irregular and may ease with rest or a change in activity. Labor contractions tend to become more regular and cause cervical change. Symptoms alone cannot reliably show whether the cervix is changing, so new or repeated contractions before 37 weeks should be assessed.

Did exercise, sex, or stress cause my preterm labor?

Usually, no single activity can be identified as the cause. In an uncomplicated pregnancy, ordinary activity and sex are not generally considered causes of preterm labor. You may receive specific restrictions if you have bleeding, ruptured membranes, cervical changes, or another pregnancy complication.

Does preterm labor mean my baby will be born now?

Not necessarily. Some pregnancies continue for weeks or reach full term. The likelihood of birth soon is assessed using your symptoms, cervical examinations, membrane status, and sometimes cervical-length or fetal fibronectin testing.

Will I need a cesarean birth?

Not solely because labor began early. Vaginal birth may still be possible. A cesarean may be

recommended for the usual obstetric reasons, such as certain fetal positions, placental problems, or concerns found during monitoring.

What are my baby's chances if birth happens early?

Outcomes depend mainly on gestational age, birth weight, the reason for early birth, and the baby's condition. Treatments before birth and specialist neonatal care can improve outcomes. A neonatal team can give information based on your baby's specific situation.

Sources

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