

PREECLAMPSIA

A Special Report

This dangerous condition often goes undetected by first-time expectant moms. Knowing the signs could save the lives of you and your baby

BY ● SANDRA HUME

Pregnant women learn to master invaluable skills: organizing a wardrobe around slip-on shoes, identifying which stores have expectant-mother parking by the door, and, most importantly, perfecting the fine art of peeing in a cup.

Yeah, it's awkward, but regular urine collection is critical for our prenatal health. A simple, inexpensive stick test helps detect the presence of protein, which indicates a serious disorder of pregnancy: preeclampsia. Read on for important details.



WHAT IS IT?

Preeclampsia, characterized by high blood pressure and protein in the urine, is essentially an inflammation of the lining of the mother's blood vessels. It affects five to eight percent of pregnancies worldwide and has been recognized for centuries as a sudden, life-threatening disease. Our mothers knew it as "toxemia," but that's an outdated term.

The disease threatens mother and baby in different but equally perilous ways. In a preeclamptic pregnancy, the placenta functions poorly and compromises baby's growth. The placenta is the baby's source of nutrition, and his demands for more food—that is, more blood—elevate the mother's blood pressure, which can lead to organ failure or seizures if left uncontrolled.

Each year preeclampsia is responsible for 76,000 maternal and 500,000 infant deaths worldwide, and complications can be severe and long-lasting for both mothers and their babies. Right now, the only cure is delivery.

TREATMENT

Doctors treating preeclampsia must carefully balance the health of two patients. "Delivery is always the right treatment for the mother, but delivering too early can be catastrophic for the infant," says Douglas Woelkers, M.D., who researches preeclampsia and teaches reproductive medicine at University of California, San Diego. "We want to control the mother's symptoms while keeping

the baby in utero for as long as possible."

This might mean admitting the mother to the hospital. She'll probably receive an anti-seizure drug, magnesium sulfate, along with medication to control her blood pressure. For pregnancies under 35 weeks, she also gets steroid injections to increase the development of the baby's lungs.

Even mild cases must be treated cautiously; the disease is "explosive and can progress rapidly," according to Marshall Lindheimer, M.D., a longtime preeclampsia expert in Chicago who has worked with the World Health Organization to combat preeclampsia globally. "A mother-to-be can go from normal health to potentially fighting for her life in a matter of hours. Fortunately, the majority of cases are diagnosed near term, and the baby can be delivered—vaginally by induction or, more likely, via Caesarean section—without problems."

But sometimes preeclampsia progresses earlier in pregnancy, and doctors may decide to deliver the baby regardless of gestational age. Preterm babies are typically sent directly to a neonatal intensive care unit (NICU), and with today's medical care they often do quite well. "Babies delivered after 34 weeks—our jumping-off point—have excellent outcomes," Woelkers says. But sadly, sometimes doctors have no choice but to deliver babies too early for them to survive.

“Preeclampsia is the leading known cause of premature birth.”

KNOW THE SIGNS

“Preeclampsia [can be] a disease of first pregnancies,” Woelkers says, illustrating a conundrum: Those most at risk are those with the least experience, so they’re usually not familiar with the warning signs. Judith Hibbard, M.D., professor of maternal-fetal medicine at the University of Illinois at Chicago, addresses this deficiency by handing out lists of these signs to her prenatal patients.

- **Persistent headache:** Headaches not helped by Tylenol or rest merit a call to your doctor.
- **Vision changes:** Vision that’s affected by flashing lights—like the kind associated with migraines—should be reported.
- **Unusual swelling:** Some swelling is normal, especially in the feet. But if no shoes fit or your hands and face are puffy, something is probably amiss. “I ask my patients if they look like their driver’s license photo,” Woelkers says. “They laugh, but they usually say no. I’ll also note if they’re not wearing rings or if they’re wearing slippers or their husband’s shoes.”
- **Sudden weight gain:** Jennifer Francis of St. Joseph, MI, gained 10 pounds in the two weeks before she was diagnosed. Women gain weight steadily through pregnancy, of course, but more than two pounds per week puts doctors on alert.
- **Nausea, flu-like symptoms, or abdominal pain:** “Nausea is rare late in pregnancy,” Hibbard says. “Nausea, abdominal pain—particularly under the right side of the rib cage—or flu-like symptoms can be an indicator of HELLP Syndrome,” a serious condition that threatens the mother’s vital organs and requires immediate delivery of the baby. Left untreated, it can cause organ failure.
- **Protein in the urine (proteinuria):** This is why you pee in a cup at every appointment. Proteinuria is one of the telltale

indicators of preeclampsia, although usually not until the disease’s late stages.

- **High blood pressure:** Women typically don’t take their own blood pressure at home, which is why prenatal appointments are so critical. While high blood pressure alone—particularly if it’s only slightly elevated and between 140/90 and 160/110—isn’t enough to diagnose preeclampsia, it can indicate the need for more tests.

If the doctor you see—either in the emergency room or your ob/gyn office—isn’t responsive to your symptoms, be persistent; request blood work, a urine test, or a blood pressure follow-up. If you aren’t referred to a perinatologist, a maternal-fetal doctor who specializes in high-risk pregnancies, seek one out. “Trusting yourself and pushing for appropriate care is very important,” says Eleni Tsigas, volunteer communications coordinator for the Preeclampsia Foundation, a non-profit organization promoting awareness and research about the disease. Woelkers agrees; in his practice as a perinatologist, he has seen preeclamptic patients whose abdominal pain led to a misdiagnosis of gallstones (and unnecessary surgery), or whose persistent headaches got them sent to a neurologist rather than a specialist like him.

THE IMPACT

Even though most symptoms disappear after the baby is born, having preeclampsia isn’t easy. Tsigas has battled severe preeclampsia through two pregnancies and has firsthand

Warning Signs

Expectant mothers who notice these symptoms should get to their doctors or an emergency room as soon as possible.

- **Unusual swelling in hands and face**
- **Vision problems like flashing lights**
- **Dizziness**
- **Unexpected nausea or abdominal pain**
- **Headache that won’t go away with Tylenol**

Postpartum Preeclampsia

Two days after my husband's birth, his mother's blood pressure surged and she went into convulsions. For a time, the possibility was very real that she might die.

My mother-in-law had eclampsia. This later stage of preeclampsia is marked by seizures and can sometimes progress to a cerebral hemorrhage—a stroke—resulting in semi-paralysis or even death. It can happen during pregnancy, but what isn't well known is that eclampsia can occur up to six weeks postpartum—even if everything's gone smoothly until then. In one study, more than 20 percent of eclampsia cases occurred more than 48 hours after birth, and almost half of the women showed no signs of preeclampsia at all.

Luckily my mother-in-law was still in the hospital—it was the '60s, not yet the age of drive-through deliveries—and today she's Grandma to our two children. In an age where the six-week checkup is the norm, it can be easy to be lulled into a sense of safety about your own health once your baby's home. Mothers exhibiting classic symptoms of eclampsia (the same as those for preeclampsia) might dismiss them in the new-mom haze or chalk them up to sleep deprivation. But it's critical to report them immediately to your doctor.

According to Marshall Lindheimer, M.D., a preeclampsia expert in Chicago, emergency room physicians are not always well versed in obstetrics and may not recognize eclampsia. So make sure you and everyone around you is familiar with the warning signs. After all, you'll want to be called Grandma someday, too.

experience with magnesium sulfate. "It makes you feel very woozy and out of it, and can blur your vision and your ability to think, almost like you're drunk."

Then there's the effect on babies. Children of preeclamptic mothers can experience Intrauterine Growth Syndrome and be smaller at birth. Preeclampsia also remains the number-one known cause of prematurity; it's responsible for 15 percent of preterm births (birth prior to 36 weeks) in industrialized countries. Preterm birth comes with its own set of risks, including cognitive and developmental delays, breathing difficulties, lung problems, and lifetime complications such as cerebral palsy. It's also taxing for parents, who don't expect to spend their first days, weeks, or even months of parenting in the NICU.

Doctors stress to their patients that nothing they did caused their preeclampsia, but an overwhelming feeling of responsibility can be hard to shake for mothers. Francis' son, Jack, was born just before 34 weeks and spent 18 days in the NICU. Intellectually she knew it wasn't her fault, "but I really felt like my body had failed him. It was supposed to be a safe place for him to spend 40 weeks, and it couldn't do the job."

Subsequent pregnancies can be a frightening waiting game. Jana Mroczek of Lafayette, IN, couldn't overcome a sense of anxiety during her second pregnancy. The previous year, severe preeclampsia forced the birth of her triplet daughters at just 25 weeks, too early for them to survive. Mroczek's heartbreak spurred her to learn everything she could about preeclampsia, including that the single largest risk factor was having developed the disease before. "The whole

pregnancy, I kept waiting for something to go wrong,” she remembers. Thankfully, all went smoothly and today her son, Alexander, is a healthy, happy 7-month-old. But her first experience will always be with her. “I’ll never take pregnancy for granted again.”

Even outside of pregnancy, the effects linger. Some women with preeclamptic pregnancies have reported long-term health problems such as chronic hypertension and unresolved kidney issues, Tsigas says. And recent research has confirmed that women who develop preeclampsia also have a predisposition to cardiovascular disease later in life.

ARE YOU AT RISK?

As Mroczek learned, the most significant indicator for developing preeclampsia is having had it before. But even if this is your first pregnancy, you’re far from risk-free. In fact, without a history to keep you on alert, it’s even more important to be aware of the signs and attend your regular prenatal appointments.


“Women with existing chronic conditions like hypertension or diabetes have a one-in-five chance of developing preeclampsia during pregnancy,” Woelkers says. Being pregnant with multiples carries a similar risk. The disease tends to strike more mothers on the extremes of age—in their teens or past age 35. And weight is a factor as well. Having a body mass index (BMI) of 30 or greater increases your risk threefold.

A recent study published in *The Lancet* shows that aspirin taken during pregnancy can reduce the risk of preeclampsia, having a preterm birth, or having a pregnancy with a “severe adverse outcome” by as much as 10 percent. So if you’re in a high-risk category listed here, you may want to chat with your doctor about starting an aspirin regimen.

If any of this describes you, be vigilant about your prenatal care. “Be an advocate for your own health,” says J. Thomas Viall, executive director of Preeclampsia Foundation. “Know what your baseline blood pressure is. Ask for any test results and an explanation of what they mean in language you can understand. You’ll feel more in control of your own health, and the health of your baby, and less anxious about being at risk.”

THE FUTURE

The long-dormant field of preeclampsia research has been an exciting one in recent years. Studies by Boston-based Ananth Karumanchi, M.D., suggest that the presence of a protein called soluble FLT in pregnant women’s blood can indicate preeclampsia weeks before its onset. If current studies run by the World Health Organization support his conclusions, a test for everyday use could be on the horizon—a phenomenal breakthrough.

Until then, it’s important to know your body and your risk, and be aware of the signs. That’s why Mroczek will always talk about preeclampsia. “If telling my story helps other women, it gives meaning to my girls’ lives. If I can take something positive out of it, it makes it a little bit easier.” 

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