Multiple Pregnancy: What You Need to Know

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In August of 2012, Lisa Pizzi was pregnant with twins. She and her husband Eric knew a twin pregnancy came with extra risks, but Lisa's pregnancy had been wonderful.

"We visited the hospital at 9 a.m. for what I thought would be a 10-minute appointment for high blood pressure. The maternal and fetal medicine doctors rushed me upstairs to labor and delivery. I didn't leave the hospital for 12 days," says Lisa.

Lisa had developed HELLP Syndrome, a rare but life-threating liver disorder. The syndrome is a variant of preeclampsia, and occurs in 0.1 percent of all pregnancies. The doctors gave Lisa steroid injections to help develop her twins' premature lungs.

"Scarlett and Grayson were delivered in an emergency cesarean section. I spent the next 24 hours in an ice bath with a magnesium drip, worried I might not survive the night," says Lisa.

While Lisa was being treated, Scarlett and Grayson were immediately transferred to the Brigham and Women's Hospital (BWH) Neonatal Intensive Care Unit (NICU), which provides Level III care for premature and seriously ill babies.

Mothers Carrying Multiple Babies Require Extra Care

While multiple babies account for only three percent of all births, the multiple birth rate is rising. According to the National Center for Health Statistics, the twin birth rate has risen 70 percent since 1980 (about 33 per 1,000 live births). The birth rate for triplets and other higher-order multiples rose dramatically, but has slowed since 1998.

A multiple pregnancy can increase the risk for complications to both the baby and mother. To find complications early enough for management or treatment, mothers carrying more than one child typically require more frequent visits with their doctors.

"Visits every two-to-four weeks allows for more ultrasounds, lab work and special testing to monitor the health of the babies," says Carolina Bibbo, MD, a maternal-fetal medicine specialist in the Division of Maternal-Fetal Medicine within the Department of Obstetrics and Gynecology at BWH.

Maternal-fetal medicine specialists work with high-risk patients to help mothers achieve the healthiest pregnancy and delivery possible. They also collaborate with specialists within the Department of Pediatric Newborn Medicine.

Challenges that May Affect the Mother

While mothers carrying multiple babies face more challenges than a single pregnancy, these risks can be managed with the guidance of a maternal fetal medicine specialist who can offer specialized high-risk pregnancy care for women who may develop a medical condition while pregnant.

Premature birth

The more babies a mother carries, the greater the chance there is for an early birth. Approximately 60 percent of twins and nearly all higher-order multiples are born premature (before 37 weeks).

"Premature babies are born before their organ systems have fully matured. They may require help breathing, eating, fighting infections, and staying warm. Many multiple birth

Scarlett and Grayson Pizzi

babies will need care in a Neonatal Intensive Care Unit," says Dr. Bibbo.

Delivery

Whether the babies are delivered vaginally or via cesarean section depends on gestational age of the pregnancy, position of the babies, their estimated weight, and the clinical situation. Delivery of multiple babies typically occurs in an operating room in case a cesarean section is needed. An operation room also allows more space to accommodate multiple babies.

The mother's nutrition

Mothers carrying two or more babies require more calories, protein, and other nutrients. It's common for a mother who is carrying more than one child to feel full more often. As such, it can be harder to consume the necessary calories, and it's important for a mother to closely monitor her nutritional status and weight.

"I recommend healthy dietary changes that may include eating small, frequent snacks, and extra protein through shakes. Also, mothers should supplement with 30 milligrams of iron in the first trimester, and 60 milligrams until delivery. I usually refer mothers to a nutritionist, who can help them better understand their daily calorie requirements, and learn more about the nutritious foods they should be eating to maintain a healthy pregnancy," says Dr. Bibbo.

Weight gain

For multiple pregnancies, above average weight gain is recommended. The Institute of Medicine recommends that a woman carrying twins who has a normal body mass index should gain between 37 and 54 pounds. Those who are overweight should gain 31 to 50 pounds, and obese women should gain 25 to 42 pounds.

Low-back pain

The extra weight to the front of a mother's body can strain muscles in the lower back, buttock, thigh, and abdomen. This can lead to low-back pain and sciatica (pain that travels down to the legs). Back pain during pregnancy is common and typically resolves after delivery.

Acid reflux

It's also common for a pregnant mother to experience heartburn, or acid reflux. If this causes too much discomfort, your doctor may prescribe a safe medication to resolve heartburn.

Gestational hypertension

Women carrying twins or multiples are at higher risk of developing high blood pressure, a condition known as gestational hypertension, or preeclampsia. This complication usually occurs in the third trimester of pregnancy.

Gestational diabetes

Gestational diabetes is a form of diabetes that develops during pregnancy. This complication occurs when the body can't make enough insulin during the pregnancy. Placental hormones counteract the actions of insulin, which leads to insulin resistance.

"A mother with gestational diabetes will have their blood sugar closely monitored. The condition can usually be controlled with diet, exercise, or a safe medication. Gestational diabetes usually resolves after delivery, but sometimes they do not, and a mother may be at a greater risk of developing Type 2 diabetes," says Dr. Bibbo.

Challenges that May Affect the Baby

Multiple pregnancy increases the risk for complications to the baby. However, more frequent visits with an obstetrician or maternal-fetal medicine specialist can help find complications early and manage or treat any potential problems.

Miscarriage

The rate of miscarriage is higher in twins than singletons, and much higher for higher-order multiples. A phenomenon called vanishing twin can occur in the first trimester. This is also known as fetal resorption, in which a fetus in a multi-gestation pregnancy dies in utero and is then partially or completely reabsorbed.

Birth defects

Twins that share a placenta are at higher risk of congenital (present at birth) anomalies, including neural tube defects (e.g., spina bifida), gastrointestinal, and heart abnormalities.


Lisa and Eric Pizzi with their children Grayson and Scarlett.

Growth restriction

The growth of a baby can be restricted if they are not receiving the nutrition they need. Growth restriction is diagnosed when the estimated fetal weight is less than 10 percent for that gestational age on the growth curve. The growth of twins appears to slow after 30 weeks. The higher rate of growth restriction in multiple pregnancies is thought to be due to uterine crowding and uteroplacental insufficiency.

Twin-to-twin transfusion syndrome

Twin-to-twin transfusion syndrome (TTTS) is a rare condition of the placenta that develops only in twins that share a placenta. It happens in about 10 percent of monochorionic-diamniotic twins (one placenta, two amniotic sacs), because of vascular connections within the placenta that are unbalanced between the twin circulations that lead to uneven flow of volume between the twins.

“It’s important to know that TTTS is uncommon and, in most cases, presents in a mild form that does not require fetal intervention. Since the diagnosis is made via ultrasound, frequent surveillance is recommended, with ultrasounds every 2 weeks, starting at 16 weeks for all monochorionic diamniotic pregnancies,” says Dr. Bibbo.

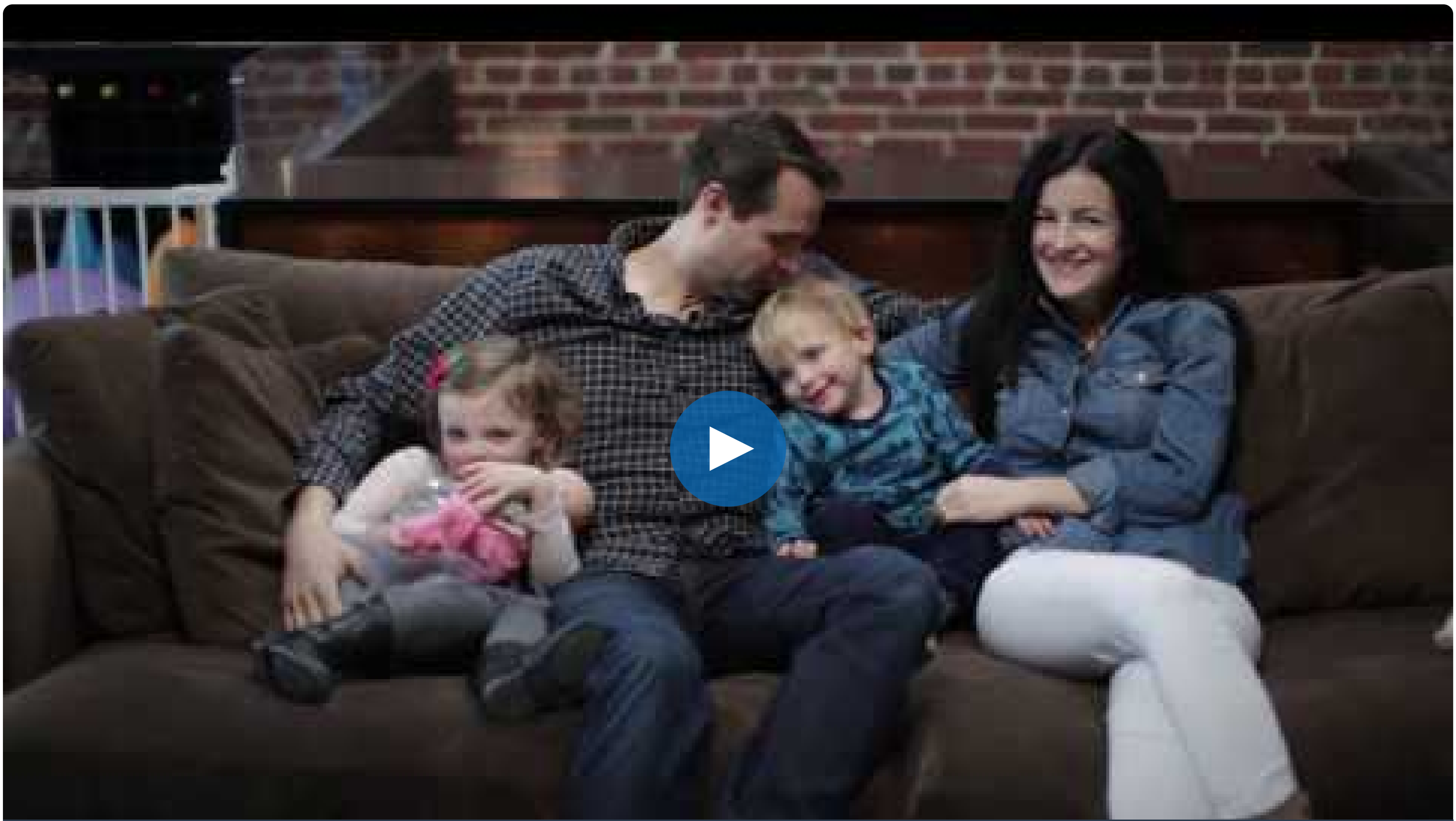
The Pizzis Start their Lives

After the birth of their two children, Lisa and Eric returned to the NICU every day for several months. Scarlett stayed in the NICU for 54 days, Grayson stayed for 103 days. Since they couldn’t bring their babies home, they brought their home to their babies by decorating the hospital rooms with family pictures.

"It wasn't how we had planned to have our kids, but we connected with so many wonderful people in the NICU, and came out of the experience with life-long friends. The NICU staff truly became part of our family," says Lisa, who now serves as the Chair of the NICU Parent Advisory Board.

One cherished member of their family is Michael Prendergast, MD, their neonatologist, and the medical co-director of the NICU. The night Dr. Prendergast helped deliver Lisa's children, it was his first night on call. He was steady, calm and skillful.

Several months after the delivery, the Pizzis brought Scarlett and Grayson home and started their life together. They are now healthy five-and-a-half-year-olds. They perform occupational therapy and physical therapy twice a week, but aren't limited in any kindergarten activities, including rolling around in the April mud at their farm school in Brookline.



In this video, Lisa and Eric Pizzi share helpful advice for working with the NICU care team.

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