



Multifetal Pregnancy Center of New Orleans



Ochsner Mission:

We serve, heal, lead, educate, and innovate.

Ochsner Vision:

Ochsner will be a global medical and academic leader who will save and change lives. We will shape the future of healthcare through our integrated Health System, fueled by our passion and strength of our diversified team of physicians and employees.

Ochsner's Multifetal Pregnancy Center of New Orleans Mission Statement:

We provide comprehensive perinatal care to patients with twins, triplets and higher order multiple gestations to obtain the best maternal and neonatal outcomes. We will achieve excellence by providing defined, comprehensive care with our dedicated team of Maternal-Fetal Medicine specialists, nutritionists, exercise physiologists, lactation consultants, and neonatologists.



Introduction/Epidemiology of Multiple Gestations

First and foremost, congratulations on becoming pregnant with a multiple gestation. For some women it has taken many years to reach this goal however for others this may be their second, or in some rare cases, their third pregnancy that has more than one baby. However you got to this point, we want to welcome you to Ochsner's Multifetal Pregnancy Center and would like to take the time to review what services we offer and why each one is important to your upcoming pregnancy.

As you may know the number of twin, triplet, and higher-order pregnancies have increased significantly in the last 30 years. In the United States, since 1980, twin births have risen 65 percent and triplet and high-order multiple births have quadrupled. This increase in multiple gestations is related to women's desire to delay child bearing till later in life and the availability of assisted reproductive techniques.

Although multiple gestations account for only 3% of all births in the United States, infants of multiple gestations comprise almost 25% of very-low-birth-weight infants (<1500gms). Severe handicap can occur in 34 out of 1000 twins and 58 out of 1000 triplet survivors. Recent National Vital Statistics data from the United States indicate that twins and triplets are approximately 5 and 12 times more likely to die by their first birthday than singletons. Extensive research of multiple gestations has shown improved fetal outcomes such as decreased preterm delivery, increased newborn weight, and decreased time in the Neonatal Intensive Care Unit when Maternal-Fetal Medicine doctors are involved in the care of the pregnancy.

Our mission at Ochsner's Multifetal Pregnancy Center is to provide comprehensive perinatal care to patients with twins, triplets, and higher order multiple gestations to obtain the best maternal and neonatal outcomes. Excellence in the care of multiple gestations is accomplished by our team of New Orleans' largest group of Maternal-Fetal Medicine specialists, nutritionists, exercise physiologists, lactation consultants, and Neonatologists.



Screening and Testing for Genetic Abnormalities in Multiple Gestations

Genetic abnormalities in pregnancy occur when a problem exists in one or more of the baby's chromosomes. Chromosomes are the individual instructions in each one of our cells that make us unique. Ochsner's Multifetal Pregnancy Center offers a variety of screening and invasive testing to identify genetic abnormalities in the multifetal pregnancy.

Prenatal screening tests can estimate a baby's risk of having a chromosomal abnormality, such as Down syndrome, without risk to the pregnancy. In the early part of pregnancy, between 11 to 13 weeks, you can choose to undergo first trimester screening (also known as nuchal translucency [NT] testing). This screening test includes an ultrasound of the back portion of the baby's neck and a simple blood draw. The ultrasound determines if your baby has increased fluid in the back of the neck, a potential sign of an underlying chromosomal abnormality. Overall, NT screening in twins has a very high detection rate (>85%) for Down syndrome and is becoming the preferred method for screening in pregnancy. If you present for consultation after 15 weeks of pregnancy you have the option of "quad screening." This is another simple blood test that can be useful for the detection of chromosomal abnormalities between 15 to 21 weeks of pregnancy.

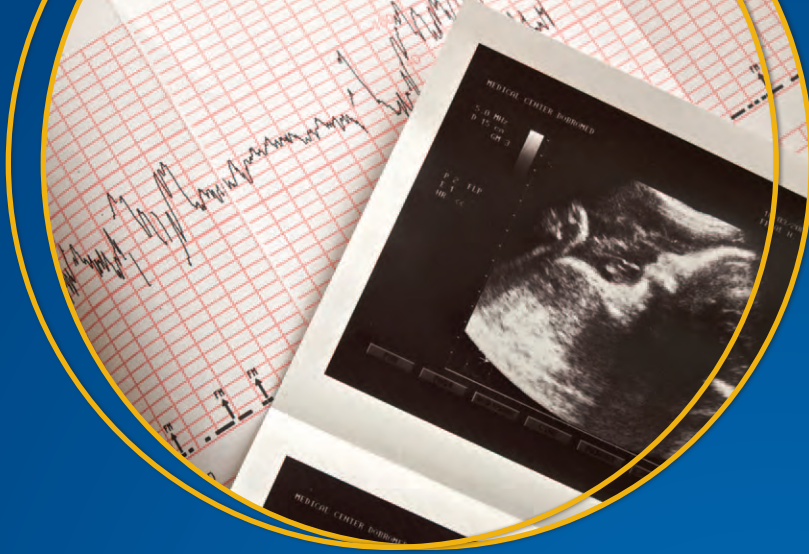
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Invasive genetic tests, including chorionic villus sampling (CVS) and amniocentesis, are used to definitively diagnose chromosomal abnormalities in pregnancy. CVS is a procedure in which a small portion of the placenta (chorion) is sampled between 11 to 14 weeks of pregnancy versus amniocentesis, which is a procedure in which a small amount of fluid around the baby (amniotic fluid) is sampled after 15 weeks of pregnancy. These tests can also be used to definitively diagnose other familial genetic conditions such as cystic fibrosis or sickle cell disease.

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Also your specialized prenatal care will include a detailed high definition ultrasound examination of your babies, usually performed between 18-20 weeks gestation. This evaluation is designed to look for structural defects that tend to occur more often in multiple than singleton pregnancies. Though not as sensitive for detecting the more common genetic diseases, an occasional ultrasound will find rare disorders that are not screened for using the tests.

Ochsner's Multifetal Pregnancy Center of New Orleans has nationally certified Maternal-Fetal Medicine doctors and sonographers who have extensive training in the performance of the above tests. We are proud to offer our patients the most innovative genetic tests that are available anywhere in the nation.

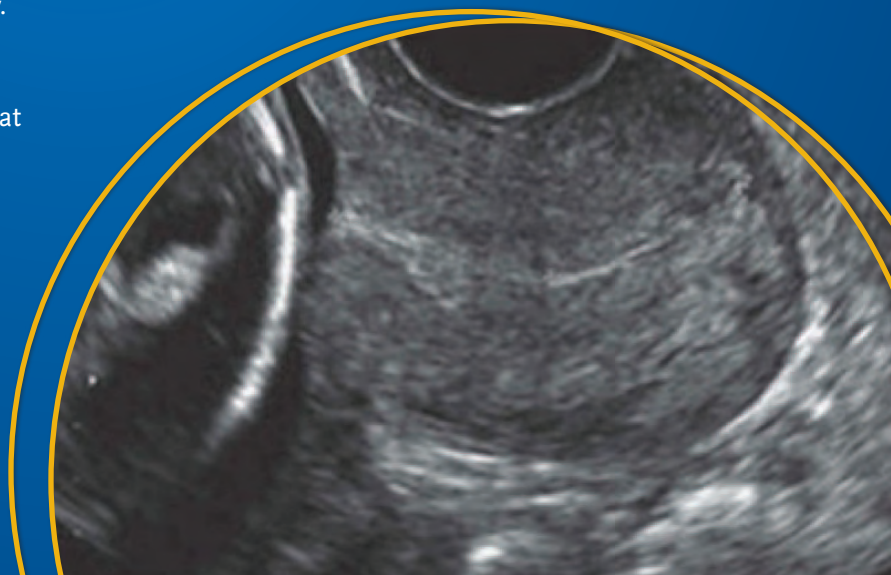


Preterm Labor Surveillance in Multiple Gestations

One common complication of carrying multiples is preterm labor and delivery. The average length of pregnancy is 35 weeks for twins, 32 weeks for triplets, and 29 weeks for quadruplets. Even though 35 weeks is reassuring, twins are 10 times more likely, and triplets 30 times more likely, than singletons to deliver very premature (less than 32 weeks). It is this group of early babies that account for the majority of long term complications of premature delivery.

One way to combat the complications of a premature delivery is early recognition of those pregnancies at highest risk for preterm delivery. Early recognition affords the opportunity to be prepared for, and sometimes prevent, premature delivery. Multiple studies have shown that transvaginal ultrasound measurement of the lower segment of the womb (an area called the cervix) can help identify women at risk of delivering early. In addition, the presence of special proteins in vaginal fluid secretions (a substance called fetal fibronectin) can also pinpoint those pregnancies at risk of early delivery.

Here at Ochsner's Multifetal Pregnancy Center of New Orleans, our Maternal Fetal Medicine physicians utilize innovative cervical length surveillance protocols, along with periodic fetal fibronectin screening, to help identify those women at risk for preterm labor. Our physicians measure the cervix with high-definition transvaginal ultrasound every two weeks from 16 to 28 weeks of pregnancy and perform fetal fibronectin screening on all women with signs and symptoms of preterm labor. If shortening of the cervix is identified or if fetal fibronectin is detected, multiple interventions, including steroid administration, administration of anti-contraction medications and even surgical stitching of the uterus (a procedure called a cerclage) may be employed to prevent early delivery.





Fetal Growth Disorders in Multiple Gestations

Fetal growth is a complex process dependent on uterine blood supply, placental transfer of nutrients, umbilical cord insertion into the placenta, and fetal genetic potential. The human womb (uterus) was not designed to carry multiple babies thus it is very common for each additional fetus to create a change in the growth of all the intrauterine occupants. Approximately 15% to 25% of twin gestations, and over 35% of triplets, can have signs of poor fetal growth (intrauterine growth restriction) of one or more of the fetuses during pregnancy.

One of the reasons for concern is that babies delivered at a low birth weight (<2500g) are 5 times more likely to die before their first birthday than their normally grown counterparts. Even more concerning is that very low birth weight babies (<1500g) are 99 times more likely to die before their first birthday than babies born of a normal weight. Because of the high incidence of growth restriction in multifetal pregnancies and

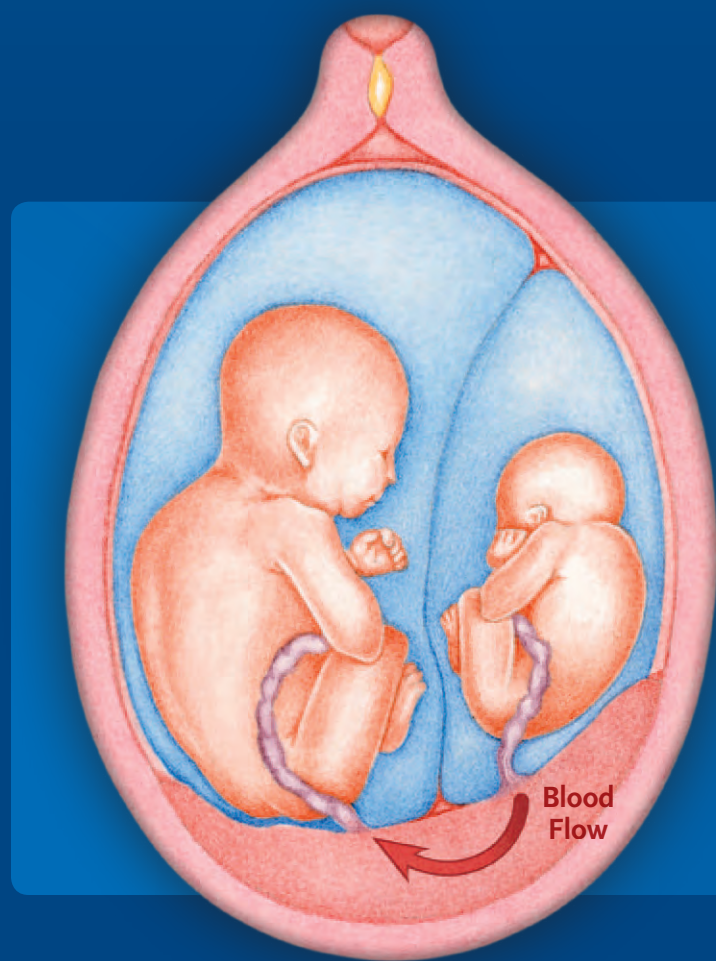
its association with poor newborn outcome it is imperative for early detection and treatment of this high-risk condition.

Ochsner's Multifetal Pregnancy Center of New Orleans employs the area's largest group of Maternal-Fetal Medicine physicians and nationally certified sonographers who are specialized in the detection and management of fetal growth disorders. As part of your specialized pregnancy care, we evaluate fetal growth in multiple pregnancies every 4 weeks with high resolution ultrasound and fetal growth charts designed specifically for multiple gestations. If we detect abnormalities in fetal growth, the growth patterns are examined even more frequently (typically every 2-4 weeks). In select cases of extreme growth restriction more intensive monitoring including hospitalization with daily fetal and maternal assessments may be employed to maximize newborn outcomes.

Twin to Twin Transfusion Syndrome (TTTS)

One rare, but very serious, complication specific to twin pregnancies is twin to twin transfusion syndrome. Twin to twin transfusion syndrome, or TTTS, is a condition which occurs in twin pregnancies that share their placenta, also known as monochorionic twins. Approximately 1 in 5 twin pregnancies are monochorionic. In 10-15% of these pregnancies, for reasons we are not sure, blood circulation in one twin (called a donor) shifts to the other twin (called a recipient). This preferential shift in blood leads to serious complications for both fetuses. If left untreated, TTTS can lead to death of one or both of the twins in over 80% of the cases.

At Ochsner's Multifetal Pregnancy Center of New Orleans one of our first goals in twin pregnancies is to determine early on if a twin gestation is at risk for TTTS. We accomplish this by close ultrasound inspection of the pregnancy and its placenta at the very first visit. For those mothers whose twins are discovered to share a placenta, our team of Maternal Fetal Medicine specialists provide high-definition ultrasound surveillance every two weeks looking specifically for signs of TTTS. Numerous lines of evidence have shown improved newborn outcomes with early diagnosis and treatment during pregnancy. With early diagnosis of TTTS options including amniotic fluid reduction, in utero laser therapy and/or delivery are available. Our team of caregivers are dedicated to providing the most comprehensive innovative care to maximize pregnancy outcomes.



Mechanism of TTTS:

Blood flow from one twin ("donor") preferentially flows to other twin ("recipient") through abnormal connections in the placenta. This uneven blood flow results in injury of both twins. If not recognized and treated early in the disease, one or both twins can die from this condition.

Nutrition for Multifetal Pregnancies

Good nutrition, especially for multifetal pregnancies, is one of the most important contributions a mother gives her developing babies. As in singleton pregnancies, nutritional intake should be increased during pregnancy to optimize fetal outcomes. However, simply “eating for three (or four)” is not an acceptable method to address the nutritional requirements of a multifetal pregnancy.

At Ochsner’s Multifetal Pregnancy Center of New Orleans we recognize the dietary challenges faced by expectant mothers who are carrying more than one baby. A nutrition consultation with our

board-certified nutritionist during early pregnancy is important to ensure adequate nutritional intake, as well as addressing any dietary issues that may arise during pregnancy.

Your nutrition session will address common topics of concern such as: food aversions and cravings, fatigue, consuming an appropriate amount of nutrient dense foods, adequate fluid intake, and individualized supplementation if warranted. You will receive a streamlined plan that focuses on your personal food preferences, daily schedule and activities and exercise regimen. Your personalized meal plan will concentrate on the appropriate calorie/protein/fat requirements based on your individual needs, and include a sample meal plan with several menu options. Together, we can empower expectant mothers with the knowledge and skills necessary to optimize nutritional intake for a healthy pregnancy.

Exercise for Multifetal Pregnancies

Many women when faced with the news of a multifetal gestation have numerous questions in regards to exercise during pregnancy. Most believe that strict bedrest early on is expected to achieve a successful outcome. Though limitation of activity is a cornerstone in some treatment plans with multiples, there is very good evidence that light to moderate exercise is beneficial to good maternal and fetal outcomes.

By teaming with our Elmwood Fitness Center’s experienced and dedicated exercise trainers, Ochsner’s Multifetal Pregnancy Center has designed specific exercise regimens to help keep mothers and babies healthy during pregnancy. As part of care at Ochsner, pregnant women are given 2 free months of membership at Elmwood Fitness Center, during which time patients have the option of consultation with a personal exercise trainer experienced in pregnancy care. Additionally, for women who are prescribed limited activity as part of their care, we have consultative services with physical and occupational therapists who will outline acceptable exercises to enhance their mental and physical well-being.





Lactation Consultation

Ochsner's Multifetal Pregnancy Center is devoted to creating a warm and compassionate environment for mothers interested in breastfeeding. Multiple lines of research have shown that breastfeeding has been associated with improved infant outcomes, especially for those born preterm. Our Lactation Services Division consists of dedicated and experienced certified nurses who provide mothers with education, guidance and the tools for successful breastfeeding.

As part of your care here at Ochsner, pre-delivery consultative services are available in the 2nd and 3rd trimester of pregnancy to introduce expectant mothers to the principles of breastfeeding. Patients meet with one of our lactation consultants and are given a personalized assessment which includes dietary recommendations, nursing techniques, and commonly asked questions. Mothers are also given supportive assistance in the transition back to work or school while continuing breastfeeding.

In addition to our consultative services, patients are able to purchase supplies from our Lactation Center that maintains a full line of nursing bras, breast pumps and other accessories. We also give our mothers support through the Warm Line, a 24-hour telephone service dedicated to answering breastfeeding questions and concerns.



Neonatal Intensive Care Unit Services

The Ochsner Neonatal Intensive Care Unit (NICU) has 42 beds available for any newborn that needs a little extra help following delivery. Our NICU has received the highest classification, that of Level III Regional by the State of Louisiana and Level III-C unit according to the standards of The American Academy of Pediatrics. To a family this means that every amenity and pediatric subspecialist (both medical and surgical) are available for their baby should the need arise. Our multidisciplinary NICU team includes board-certified neonatologists, neonatal nurse practitioners, nurses, respiratory and occupational therapists, social workers and nutritionists. To assist a family in planning for the transition to home, we also have a dedicated neonatal discharge coordinator.

The Ochsner neonatal team admits approximately 350 newborns annually, of which one-third of these babies have been transported from other hospitals. Frequently, a mother may have her obstetrical care transferred to one of our Ochsner Maternal-Fetal Medicine (MFM) physicians when it has been discovered that her baby may require neonatal subspecialty care. This coordinated approach between community obstetricians and MFM physicians allows the baby to be transported in the safest manner possible - inside its mother - while keeping the baby and mother together

following delivery. We are experts at both caring for multiples, including quintuplets, as well as the tiniest of patients, having recently discharged a baby home who weighed 13 ounces at birth. Our neonatologists are available to meet with families before delivery and provide a tour of the NICU when it is anticipated that a baby will require extra care at birth.

Our NICU is also a participating member of the Vermont Oxford Network, a nationally recognized affiliation of NICUs dedicated to providing the best outcomes to complex neonates. Our affiliation with this network allows us to provide our babies with continuous quality assessment and improvement. We constantly compare our outcomes to the nation's leading hospitals to ensure we are in line, and in most cases outperforming, the national standards.

If a mother or her babies have traveled far from home to receive care at Ochsner, the possibility of the newborns completing their hospitalization closer to home can sometimes be arranged. While in the convalescent phase of a neonatal stay (and with the permission of the family), babies may be transferred to a hospital closer to home after an accepting physician and nursery is determined.

Meet the Team



Alfred Robichaux, M.D.



Sherri Longo, M.D.



Clifton Moore, M.D.



Bernard Canzoneri, M.D.

The Maternal-Fetal Medicine group at the Multifetal Pregnancy Center of New Orleans at Ochsner Medical Center offers high quality, perinatal services for a wide variety of high-risk pregnancies.

With four fellowship-trained physicians, the Maternal-Fetal Medicine group is the largest in the greater New Orleans area. Excellent patient care is provided by combining perinatal expertise with modern and sophisticated technological capabilities for a complete and comprehensive approach to high-risk pregnancies.

Multifetal Pregnancy Center of New Orleans

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ochsner.org

