Volumes & Outcomes Summary 2022

The Fetal Care Center is one of few comprehensive fetal care centers in the world. Led by physicians from Cincinnati Children’s, TriHealth and University of Cincinnati Medical Center, our team specializes in treating complex and rare fetal conditions and is at the forefront of innovation in fetal diagnosis and intervention therapies. Our experience and expertise is shown in our volume and outcomes.

Information in this document is based on data from fetal patients cared for by Cincinnati Children’s Fetal Care Center from February 1, 2004 through June 30, 2022, except where otherwise noted.

Care for the Full Spectrum of Fetal Conditions

Total Evaluations ........................................ 8,080

- Twin-Twin Transfusion Syndrome (TTTS) .................. 2,268
- Bladder Outlet Obstruction (BOO)/Posterior Urethral Valves (PUV) .......................... 583
- Myelomeningocele (MMC)/Spina Bifida ........................... 474
- Congenital Diaphragmatic Hernia (CDH) ......................... 412
- Congenital Pulmonary Airway Malformation (CPAM/CCAM) .... 391
- Fetal Tumors ..................................................... 152
- Twin Reversed Arterial Perfusion (TRAP) Sequence ............ 136
- Amniotic Band Syndrome (ABS) .................................. 78
- Chorioangioma ..................................................... 27
- Other .................................................................. 3,559

Experience When Needed Most

In addition to amnioinfusion, amnioreductions, intrauterine transfusions, amniocentesis, and shunts; we have also performed the following procedures.

Total Procedures ........................................... 1,934

Surgical Procedures

- Fetoscopic .......................................................... 1,673
- Open Fetal Surgeries (excluding EXIT) ...................... 83

Delivery Interventions

- Cesarean with ECMO standby ................................. 78
- Ex-utero Intrapartum Treatment (EXIT) .................... 72
- Delivery with Procedures on Placental Support (POPS) .... 28

Special Delivery Unit Deliveries ......................... 381

Deliveries from July 2019 (SDU opening) through June 30, 2022
Congenital Diaphragmatic Hernia (CDH)

All patients with CDH are cared for by our dedicated CDH team of maternal-fetal medicine specialists, neonatologists, pediatric surgeons, pediatric cardiologists, ECMO specialists, nurses, nutritionists and therapists. After birth, these patients can continue their care in our CDH Program.

**Total Evaluations** ................................................. **412**

**Survival to Discharge**

- Low Risk CDH. ........................................... approaching 100%
- Severe CDH (post FETO) ........................................... **80%**

Survival data includes CDH patients with other fetal anomalies from July 1, 2016 through June 30, 2022.

Bladder Outlet Obstruction (BOO)/Posterior Urethral Valves (PUV)

**Total Evaluations** ................................................. **583**

- Fetoscopic Interventions ........................................... **27**
- Amniopent for Serial Amnio-infusions .......................... **45**

Our team has also performed several hundreds of vesicoamniotic shunting, bladder taps, percutaneous needle amnioinfusion, and peritoneal-amniotic shunting for urinary ascites.

* Data includes amniports for serial amnio-infusions from January 1, 2011 – June 30, 2022.

Fetoscopic Endoluminal Tracheal Occlusion (FETO)

We provide FETO intervention for Left and Right sided CDH based on criteria and patient evaluation.

The fetoscope instrument is guided through a small incision in the mother’s uterus and into the fetal trachea.

- A. Balloon inflated inside baby’s trachea
- B. Pressure helps lungs to grow
- C. Balloon traps fluid inside lung and pressure helps lungs to grow

Our surgeons have performed more than 50 FETO procedures.
Our center has performed more Fetoscopic Laser Photocoagulation (FLP) procedures for TTTS than most other centers in the nation with a 91.6% survival rate of at least one twin*.

*Tall patients (Stage I – IV) including selective fetal growth restriction, hydrop fetalis, and patients with short cervix.

Twin-Twin Transfusion Syndrome (TTTS)

Total Evaluations ........................................... 2,268
Twins ............................................................. 2,166
Triplets .......................................................... 102
Fetoscopic Interventions ........................................ 1,431

Fetoscopic Laser Photocoagulation (FLP) Procedures

Total FLP Procedures Performed ...................... 1,338
FLP Procedures by Type
Posterior Placenta ................................................. 51%
Anterior Placenta .................................................. 49%

FLP Procedures by Gestational Age
- 16-18 Weeks ................................................... 14%
- 18-24 Weeks .................................................... 71%
- 24-28 Weeks ..................................................... 15%

Survival Rates for Patients Undergoing FLP Procedures

Quintero Stages I, II, III
All patients including placental insufficiency/growth restriction and patients with short cervix.
Survival of at Least One Twin ............................... 92%
Survival of Both Twins ......................................... 73%
Overall Survival ................................................. 82%

Quintero Stage IV
All patients including placental insufficiency/growth restriction and patients with short cervix.
Survival of at Least One Twin ............................... 85%
Survival of Both Twins ......................................... 69%
Overall Survival ................................................. 77%

*All patients (Stage I – IV) including selective fetal growth restriction, hydrop fetalis, and patients with short cervix.
Data reflects twin gestations from July 1, 2011 to June 30, 2022.
We are one of the largest centers in the nation for MMC evaluations and procedures performed.

Myelomeningocele (MMC)/Spina Bifida

Total Evaluations .................................................. 474
Prenatal MMC Repairs ........................................... 124
Fetoscopic Prenatal MMC Repairs* ............................ 66
Fetoscopic Prenatal MMC Repairs Delivered Vaginally* 41%

* Data reflects repairs starting in 2016.

Congenital Pulmonary Airway Malformation (CPAM)

Total Evaluations .................................................. 391

Procedures by Type

Open Fetal Surgery .................................................. 7
EXIT-to-Resection ................................................... 11
Shunt Placement ...................................................... 39

Fetal patients diagnosed with low risk CPAM and treated at our center have a 100% survival rate.

Twin Reversed Arterial Perfusion (TRAP) Sequence

Total Evaluations .................................................. 136

Fetal patients diagnosed with TRAP Sequence and treated at our center have a 98% survival rate.

Cincinnati Children’s is ranked #1 in the Midwest and #3 in the nation among Honor Roll hospitals.