

# Outcomes Data: Open Fetal Surgery for Spina Bifida (Myelomeningocele) Repair

## First in Texas

Physicians affiliated with The Fetal Center<sup>1</sup> at Children’s Memorial Hermann Hospital were the first in Texas to perform open fetal surgery for the repair of myelomeningocele, the most severe form of spina bifida, in May 2011. This procedure followed the published results from the seven-year multicenter clinical trial, the Management of Myelomeningocele Study (MOMS), in March 2011. Overall, The Fetal Center’s outcomes data is better than, or mirrors those reported in the MOMS trial, and the percentage of patients at The Fetal Center who delivered past 37 weeks is almost double that of the MOMS trial.

Below is an overview of The Fetal Center’s clinical outcomes data for the fetal surgical repair of spina bifida. The data is compared to the MOMS trial results, which included 183 surgically eligible randomized patients – 80 patients underwent postnatal surgical repair and 78 underwent fetal surgery for spina bifida repair.

We strive to be transparent and provide up-to-date information on our patient outcomes. Our hope is that the data below serves as a helpful resource when making informed decisions regarding care.

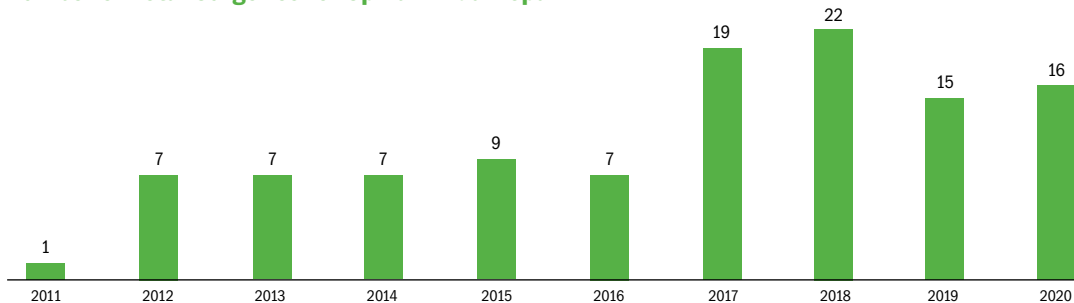
**For more information or to speak with a clinician at The Fetal Center, call 832.325.7288 or email [thefetalcenter@memorialhermann.org](mailto:thefetalcenter@memorialhermann.org).**

## Overview

Since The Fetal Center’s opening in 2011, the program has grown in a number of ways. As a national referral program, The Fetal Center currently receives patient referrals from 38 states and continues to serve as a leader in fetal diagnosis, fetal intervention and comprehensive fetal care for unborn babies with abnormalities.

For the fetal spina bifida repair, the number of open fetal surgeries performed by The Fetal Center’s affiliated specialists has increased since 2011 with a significant rise in procedures since 2016. The data below includes the number of open fetal surgeries performed year-over-year (YOY) since The Fetal Center’s opening.

## Number of Fetal Surgeries for Spina Bifida Repair



(The Fetal Center) Date range: May 2011 – December 31, 2020.

(over)

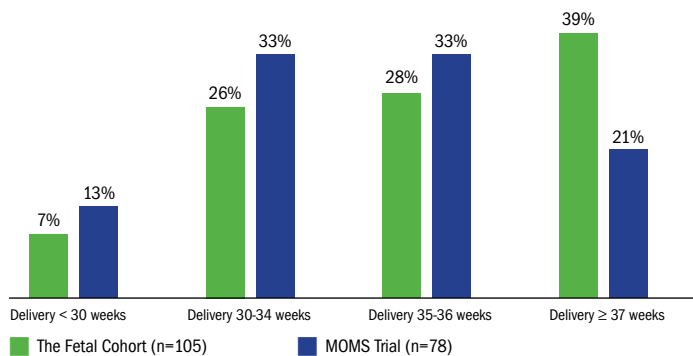
Since 2011, The Fetal Center has evaluated more than 284 women for fetal spina bifida repair; 128 patients met criteria for fetal surgery; 107 patients elected to undergo open fetal surgical repair, and 2 patients have elected to undergo fetoscopic surgical repair with a human umbilical cord as a meningeal patch. The data below is an overview of The Fetal Center’s clinical outcomes data for open fetal surgical repair from May 2011 – November 10, 2020.

Fetal Surgery for Spina Bifida Repair – Summary			
	The Fetal Center Cohort (n=105)	MOMS Trial – Fetal Surgery (n=78)	MOMS Trial – Postnatal Surgery (n=80)
Gestational Age at Surgery	25.1 ± 0.6	23.6 ± 1.4	n/a
Gestational Age at Delivery	35 ± 3.2	34.1 ± 3.1	37.3 ± 1.1
Perinatal/Neonatal Demise	3 (3%)	2 (3%)	2 (2%)
VP Shunt at One Year	36/73 (49%)	31 (40%)	66 (82%)

(The Fetal Center) Date range: May 2011 – November 10, 2020; N = 105 patients.

### Gestational Age at Delivery

Mothers who undergo open fetal surgery for spina bifida repair are asked to remain in Houston for the first two weeks following surgery. In the majority of cases, they return to their homes and are then co-managed with their referring maternal-fetal medicine specialist with a scheduled C-section delivery at 37 weeks. Overall, 39 percent of our patients delivered past 37 weeks gestation as compared to 21 percent in the MOMS trial. At The Fetal Center, the mean gestational age at delivery is 35 weeks and the median is 36.4 weeks.



(The Fetal Center) Date range: May 2011 – November 10, 2020; N = 105 patients.

We encourage you to reach out to other healthcare centers to request and review their outcomes data in order to utilize the information available when choosing your healthcare options.

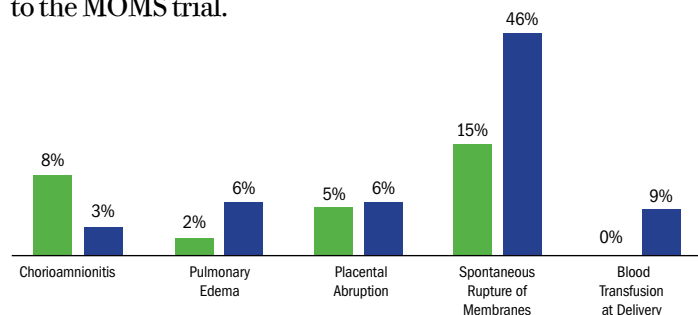
**For more information about our data, call 832.325.7288.**

<sup>1</sup> Located within the Texas Medical Center, The Fetal Center is affiliated with Children’s Memorial Hermann Hospital, McGovern Medical School at UTHealth in Houston, and UT Physicians.



### Maternal Complications

The affiliated team makes significant efforts to eliminate or minimize any potential maternal complications related to fetal surgery. For most of the conditions considered below, The Fetal Center had a lower complication rate as compared to the MOMS trial.



(The Fetal Center) Date range: May 2011 – November 10, 2020; N = 105 patients.

### Ventriculoperitoneal (VP) Shunt Rate

The MOMS trial showed increasing benefits to the baby, including a reduction in the need for shunts. Overall, The Fetal Center’s cohort data closely mirrored the VP shunt rate of the MOMS trial.

VP Shunt Rate		
	The Fetal Center Cohort	MOMS Trial
VP Shunt at One Year	36/73 (49%)	31/78 (40%)

(The Fetal Center) Date range: May 2011 – November 10, 2020. N = 73 patients, excluding neonatal demises.

