

Outcomes Data: Laser Ablation for Twin-Twin Transfusion Syndrome (TTTS)

Twin-Twin Transfusion Syndrome (TTTS) - Experience Matters

The Fetal Center¹ at Children's Memorial Hermann Hospital utilizes the experience and skill of the internationally recognized team of affiliated fetal surgeons to provide high-quality care to patients. As a national referral program, The Fetal Center currently receives patient referrals from 36 states and continues to serve as a leader in fetal diagnosis, fetal intervention and comprehensive fetal care for unborn babies with abnormalities.

Below is an overview of The Fetal Center's clinical outcomes data for the treatment of TTTS. We strive to provide our patients and community with the most up-to-date information on our patient outcomes. Our hope is that the below data serves as a helpful resource to you when making informed decisions regarding your care.

For more information about our data, contact The Fetal Center at 832.325.7288.

Overall Summary

Since 2011, The Fetal Center has performed 444 cases of laser photocoagulation for the treatment of TTTS at Children's Memorial Hermann Hospital. The data below reflects surgical volume from September 2011 - October 2018 and represents 392 patients with known outcomes at 30 days post-delivery.

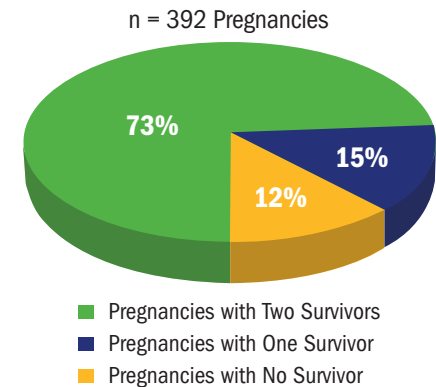
Overall, survival of both babies is seen in 73 percent of cases, with survival of one twin in 15 percent of cases.

Total Number of Laser Case Procedures	444
Number of Laser Repeat Cases	6
Number of Twin Pregnancies	425
Number of Deliveries	397
Number of Deliveries with Known 30-Day Outcome	392

Survival Rate at 30 Days Post-Delivery

30-Day Post-Delivery Survival Rate by Gestational Age at Time of Fetal Intervention				
Gestational Age at Time of Procedure	Total	Pregnancies with Two Survivors	Pregnancies with One Twin Survivor	Pregnancies with No Survivors
16 - 18 weeks	111	73 (66%)	23 (21%)	15 (14%)
19 - 21 weeks	162	126 (78%)	14 (9%)	22 (14%)
22 - 24 weeks	87	63 (72%)	15 (17%)	9 (10%)
25 - 27 weeks	31	23 (74%)	8 (26%)	0 -
28 + weeks	1	0 -	1 (100%)	0 -
SUMMARY	392	285 (73%)	61 (15%)	46 (12%)

Survival Rate at 30 Days Post-Delivery



*TTTS Stage was undetermined in one case, which represents 0.26% of known outcomes.

(over)

TTS 30-Day Post-Delivery Survival Rate by Cervical Length

The Fetal Center is committed to a highly aggressive approach to the overall survival of all twin pregnancies, treating some of the rarest and high risk cases - including mothers with a cervical length of less than 1.5 cm, which increases a mother's risk of spontaneous preterm birth by almost 50 percent, according to the *American Journal of Obstetrics and Gynecology*.

The below data reflects surgical volume from September 2011 - October 2018. The data represents 390 patients with known outcomes at 30 days post-delivery, specifically highlighting outcomes based on mothers' cervical length. As noted below, a cervical length of ≥ 1.5 cm was found in 95% of cases at The Fetal Center.

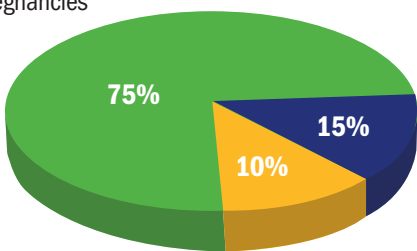
TTS 30-Day Post-Delivery Survival Rate by Cervical Length				
	Number of Cases*	Pregnancies with Two Survivors	Pregnancies with One Survivor	Pregnancies with No Survivor
Number of cases with Cervical Length ≥ 1.5 cm	371	277 (75%)	57 (15%)	37 (10%)
Number of cases with Cervical Length < 1.5 cm	19	7 (37%)	3 (16%)	9 (47%)
Total	390	284 (73%)	60 (15%)	46 (12%)

*Cervical length was undetermined in two cases.

Note - Those with a cervical length of less than 1.5 cm are at increased risk and should be seen by a physician as soon as possible. Please call The Fetal Center at 832.325.7288.

30-Day Post-Delivery Survival Rate: Cervical Length ≥ 1.5 cm

n = 371 Pregnancies



- Pregnancies with Two Survivors
- Pregnancies with One Survivor
- Pregnancies with No Survivor

30-Day Post-Delivery Survival Rate by TTS Stage

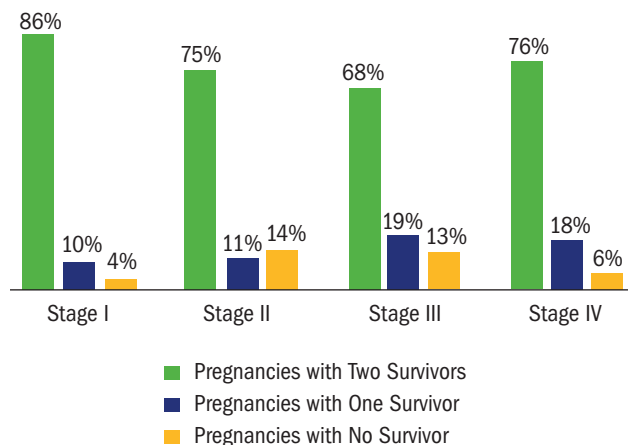
The tables below reflect surgical volume from September 2011 - October 2018 and represents data from 392 patients with known outcomes at 30 days post-delivery.

30-Day Post-Delivery Survival Rate by TTS Stage				
TTS Stage	Cases (percent of total cases*)	Percent of Pregnancies with Two Survivors	Percent of Pregnancies with One Survivor	Percent of Pregnancies with No Survivor
Stage I	49 (13%)	86%	10%	4%
Stage II	115 (29%)	75%	11%	14%
Stage III	210 (54%)	68%	19%	13%
Stage IV	17 (4%)	76%	18%	6%

*TTS Stage was undetermined in one case, which represents 0.26% of known outcomes.

30-Day Post-Delivery Survival Rate by TTS Stage

n = 392 Pregnancies



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.