

# Outcomes in a cohort of patients with Stage I twin-to-twin transfusion syndrome (TTTS)

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## Objective

To determine pregnancy outcomes of patients who present with Stage I twin-to-twin transfusion syndrome (TTTS).

## Methodology

**Study design:** Retrospective observational study

**Duration of study:** April 2007 to December 2016

**Place of study:**

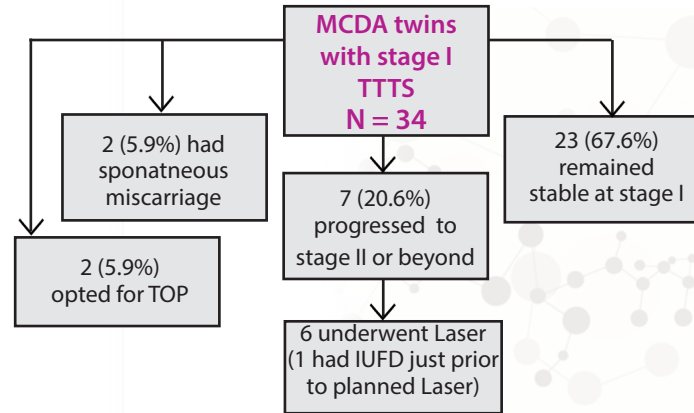
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**Inclusion criteria:**

All monozygotic twins presenting with Stage I TTTS

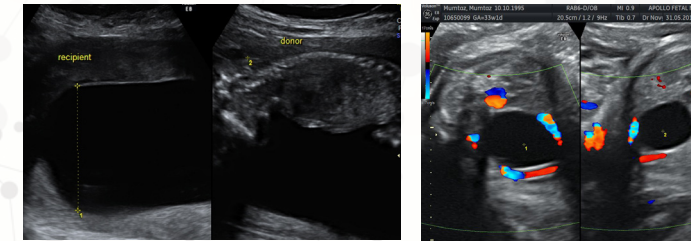
**Exclusion criteria:**

- TTTS Stage II and/or above at presentation
- Monozygotic twins with structural or chromosomal abnormalities



Details of patients at Apollo who required intervention due to progression in stage 1 of TTTS

	Case 1	Case 2	Case 3
GA at diagnosis of TTTS (weeks)	19	18	18
CHOP score at presentation	Recipient 0 Donor 0	Recipient 0 Donor 0	Recipient 0 Donor 0
GA at worsening of stage & fetal treatment	24	22 <sup>+1</sup>	20
Procedure	Laser Ablation	Laser Ablation	Laser converted to bipolar cord coagulation
GA at delivery (weeks <sup>+ds</sup> )	31 <sup>+3</sup>	33	27 <sup>+6</sup>
Indication	sFGR, impaired dopplers	PTL	Abruption
Birth weight (gm)	2100, 1700 (A&W)	1800, 1200 (A&W)	850 (Died)



	Expectantly managed (n=23)	Laser (n = 6)
Mean GA at diagnosis (weeks)	23 weeks	
Mean GA at delivery (weeks)	33.6	31.7
Mean birth weight	1839	1623
Complications	Preterm delivery	PPROM, Abruption
Twin live birth rate	100%	66.7% (8/12)

## Conclusion

Numbers are too small for analysis  
 Expectant management is a better option in Stage 1 TTTS (32 % showed progression)

## References

1. Evolution of Stage 1 Twin-to-Twin Transfusion Syndrome (TTTS): Systematic Review and Meta-Analysis. Khalil A, Cooper E, Townsend R, Thilaganathan B Twin Res Hum Genet. 2016 Jun;19(3):207-16
2. Randomised Controlled Trial comparing a conservative management and Laser Surgery (TTTS1) ClinicalTrials.gov Identifier NCT01 220011

Monozygotic TWINS with TTTS

Quintero Staging

2 Weekly Followup till Outcome

Stage 1 included in Study