# The Fetal **Medicine Foundation**

# **FETOSCOPIC LASER ABLATION OF ANASTOMOTIC VESSELS FOR TREATING TTTS: RESULTS**

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## OBJECTIVE

To analyse the results of the fetoscopic laser ablation of anatsomotic vessels in two cases of TTTS diagnosed in our hospital and treated in a specialized hospital, and compare them with the results described in the literature

### **METHODS**

Two clinical cases of TTTS diagnosed in the Albacete hospital, which were treated with fetoscopic laser ablation, are presented.

A bibliographic review was carried out using Medline, Pubmed, UpToDate and Scielo databases, and limiting the search to the last 5 years. The search criteria used were "TTTS, Fetoscopic laser ablation of anastomotic vessels, results".

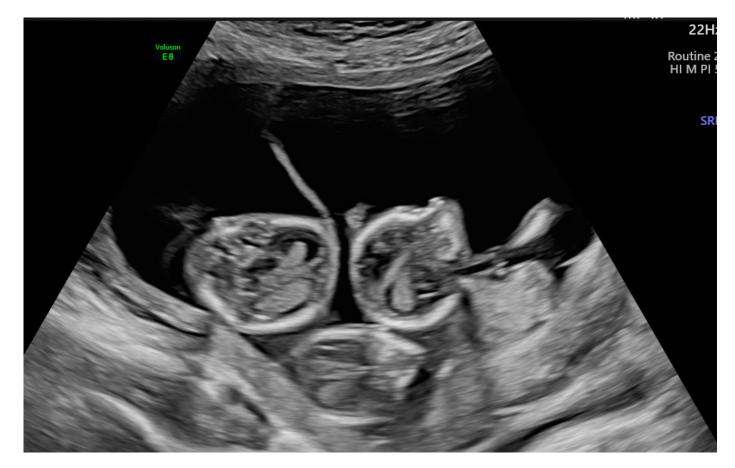
#### RESULTS

|                         | Type of gestation   | Diagnosis of<br>TTTS    | Fetoscopic<br>laser ablation | Evolution  | Delivery  |
|-------------------------|---|-------------------------|------------------------------|--|---|
| First clinical<br>case  | Monochorionic<br>diamniotic   | At 17 weeks<br>Stage II | At 17 weeks<br>Successful    | Donor twin: dies in<br>uterus (19 w)<br>Recipient twin: small<br>for gestational age                 | Premature at 28<br>weeks (PROM)<br>Healty recipient twin  |
| Second clinical<br>case | Triple (monochorionic<br>diamniotic + twin with<br>placenta and single sac) | At 18 weeks<br>Stage II | At 18 weeks<br>Successful    | Donor twin: FGR and<br>alterations in his<br>neurosonography<br>(23 w)<br>Recipient twin:<br>healthy | Spontaneus preterm<br>at 32 weeks.<br>Deceased donor twin<br>Healthy recipient twin<br>Third healthy twin |

The survival rate of at least one twin after treatment with fetoscopic laser ablation and the most frequent complications of the technique described in the literature, as follows, coincide with our clinical case:

| Stage of TTTS | Survival of at |
|---------------|----------------|
|               | least one win  |
| 1             | 89,9%          |
| П             | 85%            |
| Ш             | 81,5%          |
| IV            | 82,8%          |

Most frequent complications Preterm brith Prelabour ruptura of membranes Persistent TTTS (due to persistence of anastomoses or their revascularization)



Second clinical case: triple gestation (monochorionic

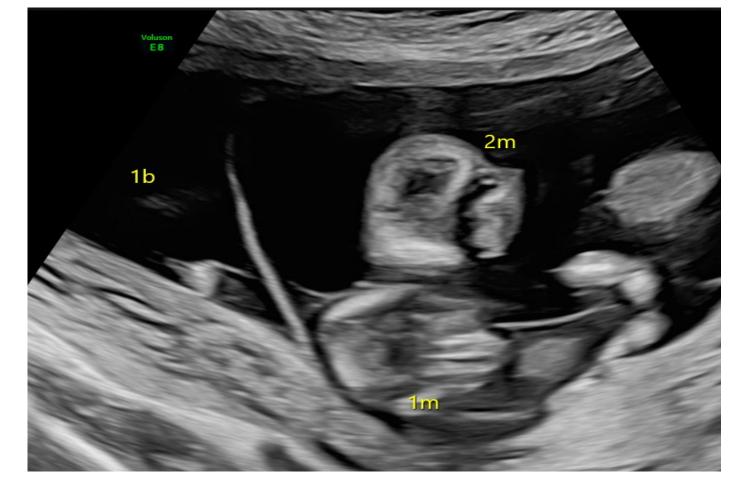
## CONCLUSION

TTTS is a pathology that has always been characterised by unfortunate perinatal outcomes. However, the advent of fetoscopic laser ablation of anastomotic vessels, despite its possible complications, has significantly increased the survival rate of at least one twin in TTTS.



Second clinical case: TTTS with "stuck twin"

*diamniotic + twin with placenta and single sac)* 



Second clinical case: triple gestation. TTTS in monochorionic diamniotic twins, with "stuck twin"