



Objective

Twin-Twin Transfusion Syndrome (TTTS) is a condition that can affect twin monochorionic gestations. Prenatal diagnose of TTTS, is made by ultrasound. It must show a monochorionic diamniotic pregnancy, in which one twin has oligohydramnios, and the other has polyhydramnios. We report a case of early TTTS in a monochorionic diamniotic twin pregnancy, successfully treated with fetoscopic anastomosis ablation.

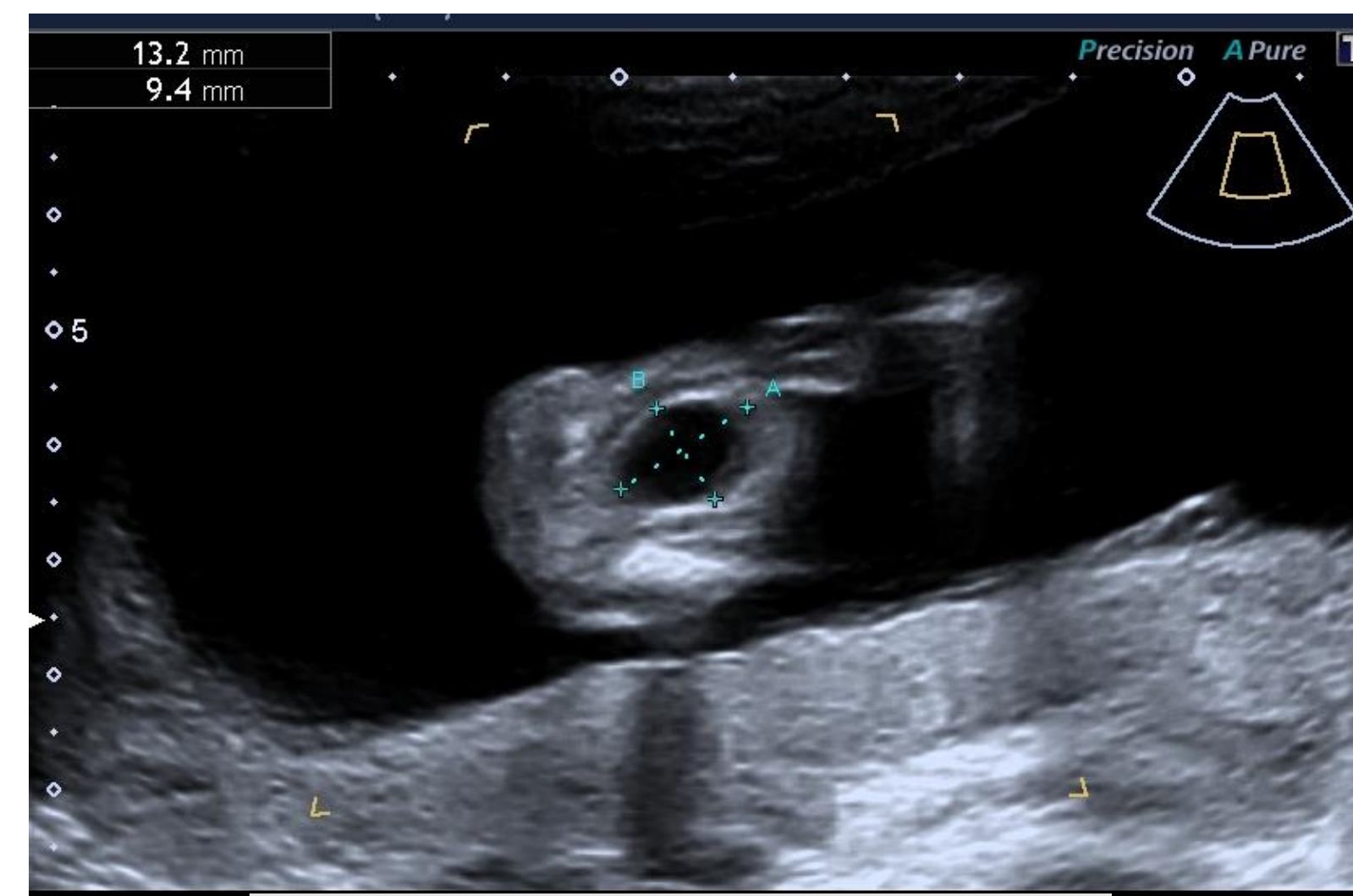


Case Report

A 29-years old healthy, primigravida, followed in our hospital obstetrics consultation for a monochorionic diamniotic, spontaneous pregnancy, complicated with gestational diabetes.

15W3D

- Amniotic fluid discrepancy, suggesting TTTS.
- The amniotic fluid on donor fetus fulfilled criteria of oligohydramnios and receptor fetus polyhydramnios, without growth discordance, bladders were both visible.

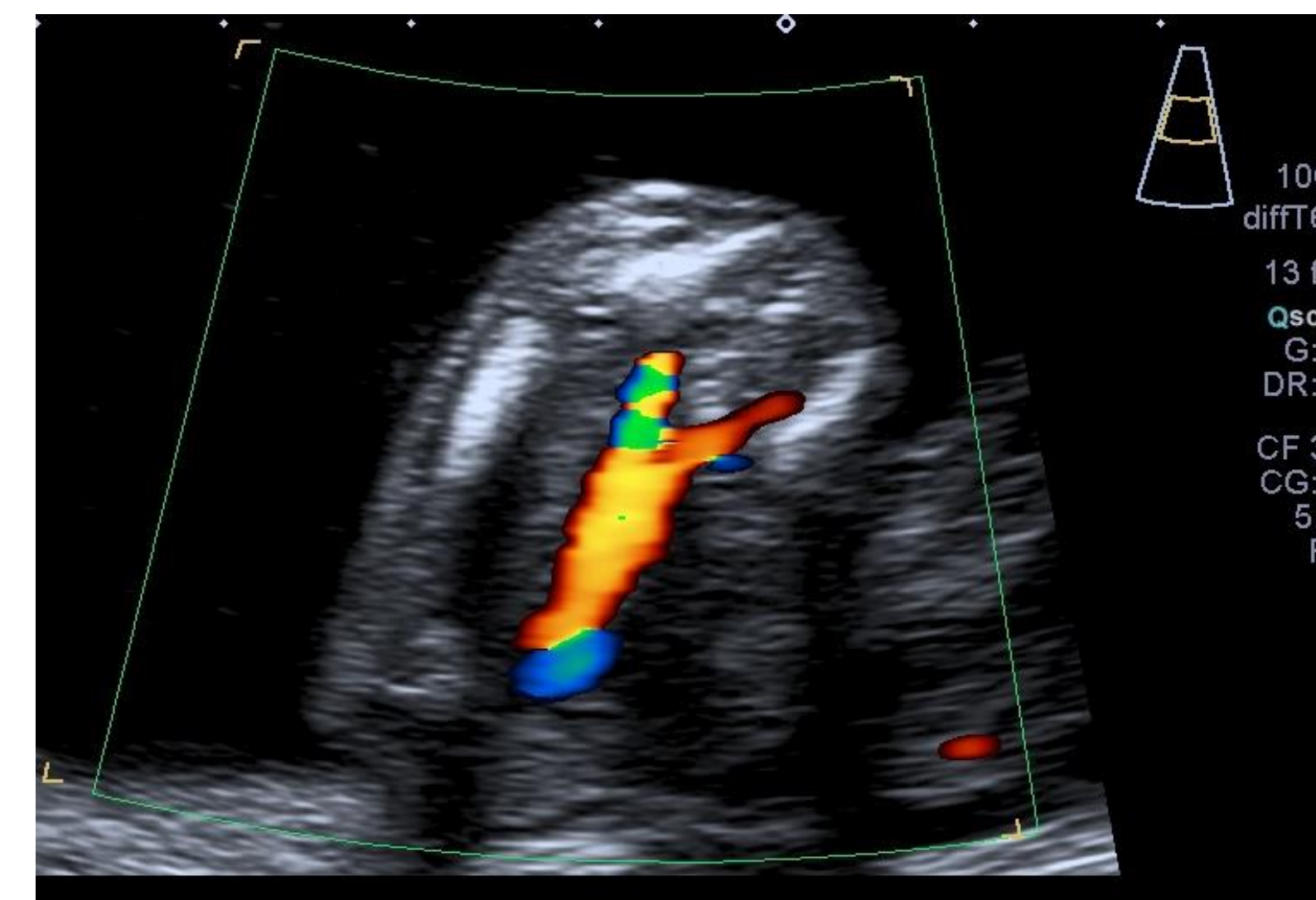


Receptor fetus blader

16W

The donor twin bladder was not visible, but doppler studies were normal, making the diagnose of type 2 TTTS, in Quintero staging.

The genetic study of both fetuses was normal, with karyotype 46, XY.



Donor fetus blader

18W5D

- Was performed **fetoscopic laser photocoagulation** of the anastomosis under ultrasound guidance, in a specialized centre.

- Weekly ultrasound surveillance was performed, without signs of TAPS.

20W

- Amniotic fluids were normal, with a growth discrepancy of 17% (245g vs 307g).
- In the following weeks there was a balance of amniotic fluid, and resolution of growth discrepancy.



Receptor Fetus: Male, 2105g, APGAR score 9/10/10.

30 W

- Neurosonography was normal in both fetuses.
- Echocardiography showed a predominance of the right ventricle, with a prominent aortic arch, in fetus B without pathological meaning.



Donor Fetus: Male, 2200g, APGAR score 9/10/10.

36 W

Both fetus were delivered by a C – Section.



Placenta

Discussion

TTTS is the result of a transplacental shunting of blood from one twin to the other, through deep arteriovenous anastomoses. Although all monochorionic placentas have some vascular anastomoses, TTTS occurs only in 15% of MC pregnancies.

The fetoscopic laser photocoagulation is a promising treatment for TTTS, since it addresses the underlying pathophysiology. Recent studies have demonstrated a high survival rate, with less complications.

We report a case of early TTTS, since the diagnose was before the 16-17 week, where the screening is recommended. Despite the early beginning this was a successful example of fetoscopic laser coagulation in an early TTTS with good neonatal outcomes.