TRAP sequence: conservative management
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Objective
Our aim was to report the conservative management of a twin pregnancy with an acardic fetus, with special focus in the cardiovascular function of the pump fetus, which is considered one of the main mortality factors.

Methods
It was performed the case report and literature review.

Results
The patient was a 29-year-old woman referred to fetal medicine service due to obstetric ultrasound at 14 weeks of gestation showing monochorionic and diamniotic twin pregnancy with twin 2 presenting malformation of the upper portion of the body, suggestive of an acardiac fetus. The fetal ultrasound performed at hospital confirmed this diagnosis, that was of twin reverse arterial perfusion sequence (TRAPS). After this, she was referred to laser treatment for umbilical cord ablation in a reference service of the country. At evaluation, there were no signs of hemodynamic decompensation in the pump fetus, and, as blood flow to the acardiac fetus was mostly restricted to the umbilical cord (there was a minor blood flow within the acardiac fetus), there was no surgical indication at that moment. Morphological ultrasound performed at 22 weeks of gestation revealed a pump fetus without morphological abnormalities, weighing 560 g, and an acardiac fetus, represented by a dysmorphic mass, weighing 165 g. There was evidence of vascularization inside the acardiac fetus through Doppler evaluation. Echocardiogram of the pump fetus was normal. Magnetic resonance imaging did not show alterations of the pump fetus. The acardiac fetus was composed by the lower portion of abdomen and lower limbs, presenting significant edema. Periodic ultrasounds were performed from 26 weeks of pregnancy in order to early diagnose any cardiac decompensation of the pump fetus. The parameters evaluated consisted of the ratio between the weights of the acardiac twin and the pump fetus; cardiothoracic ratio of the pump fetus; tricuspid regurgitation view; presence of polyhydramnios in the pump fetus and ductus venosus Doppler of the pump fetus. These parameters remained normal and it was decided to hospitalize the patient at 30 weeks gestation for ultrasound monitoring. The pump fetus, a girl, was born at 33 weeks of pregnancy weighing 2,125 g and presenting Apgar scores of 8/9. The acardiac fetus weighed 1,090 g and had an aspect of a shapeless mass with relative more development of the lower limbs. The pump twin presented early respiratory dysfunction. However, it evolved without complications and was discharged of the hospital 14 days after birth.

Conclusion
Twin pregnancy with acardiac fetus is a rare event, having few described cases in the literature with conservative management. We identified some factors that could help in the management of future cases, as early diagnosis and assessment of hemodynamic stability.