

# CASE SERIES ACARDIAC TWINS AT MOH HOSEIN HOSPITAL, PALEMBANG RARE CASE

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## INTRODUCTION

Acardiac twin is a rare complication of monochorionic twin pregnancies involving one normal fetus and one fetus without a heart or with a rudimentary heart (acardiac twin). The incidence of acardiac twins is estimated at 1:35,000 pregnancies and 1:100 monozygotic twin pregnancies. The purpose of this case series is to understand how to diagnose the acardiac twin for early detection and further management.

## CASE REPORT

**Case 1:** A 27-year-old woman, G3P2A0, was referred for suspected Twin-to-Twin Transfusion Syndrome (TTTS). Ultrasound at 31 weeks showed polyhydramnios, transverse lie of the twins, and no visible head & heart in the second fetus, indicating an acardiac twin. Amnioreduction was performed due to maternal dyspnea. The patient went into labor the next day, and an emergency cesarean section was performed. The first baby was born alive, a girl, BW 1710 gr, the second baby was an acardiac acephalus, BW 2160 gr.



**Figure 1.** Ultrasound results of the Acardiac Twin fetus in case 1

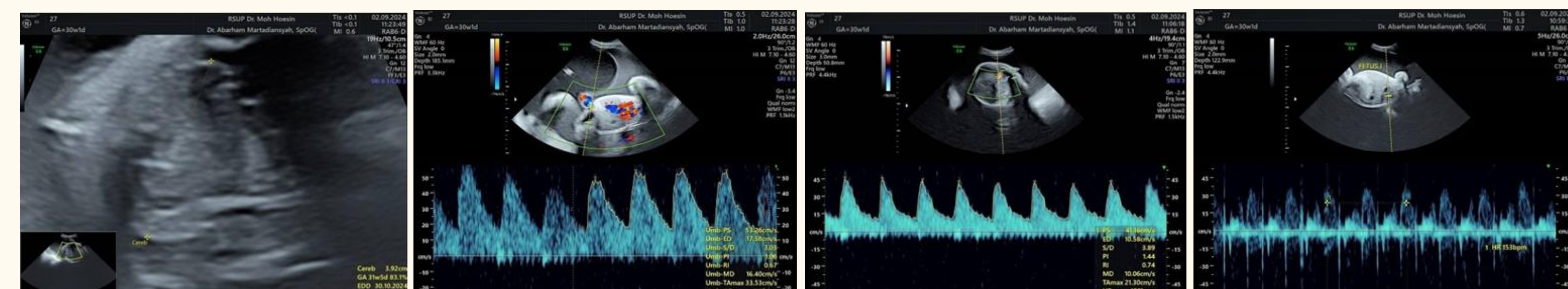


**Figure 2.** Ultrasound results of the Acardiac Twin fetus in case 1



**Figure 3.** Ultrasound results of the Donor fetus in case 1



**Figure 4.** Ultrasound 4D results of the Acardiac & Donor fetus in case 1



**Figure 5.** Post partum picture of case 1

**Case 2:** A 28-year-old woman, G1P0A0, at 12 weeks gestational age, was diagnosed with a monochorionic, diamniotic twin pregnancy. One fetus appeared normal, and the other was seen as an acardius acephalus twin. At 17 weeks of gestation, laser coagulation was performed on the abdominal aorta of the acardiac fetus. The amniotic membrane was ruptured 2 days after the procedure, the donor fetus became IUFD and was born with BW 110 gr, BL 18 cm, the second fetus was an acardiac acephalus, BW 20 gr, BL 7 cm.



**Figure 6.** Ultrasound results of the second fetus in case 2, acardiac twin

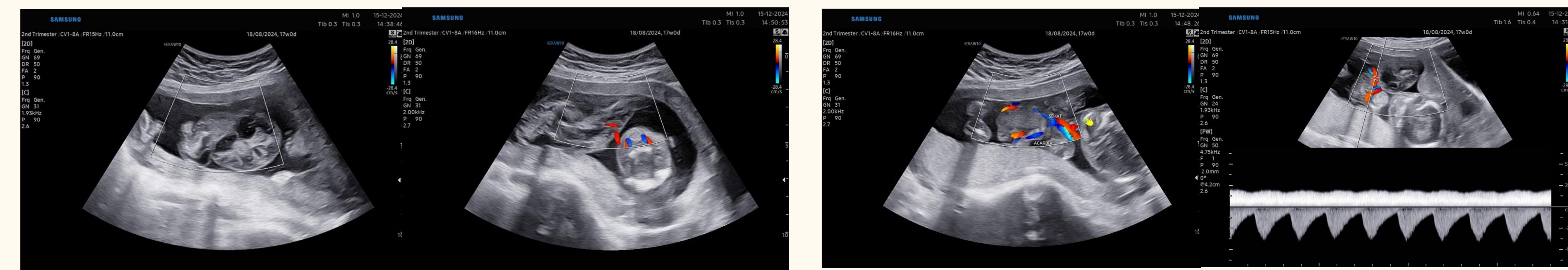


**Figure 7.** Ultrasound results of the Acardiac fetus in case 2

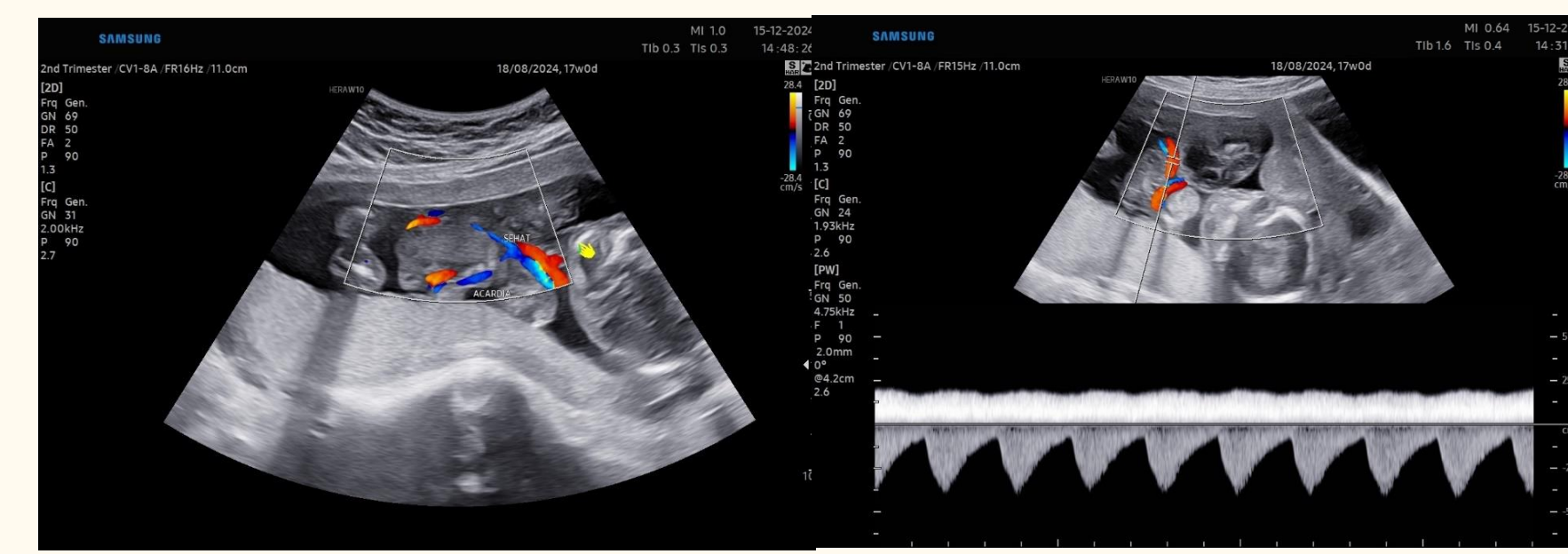


**Figure 8.** Ultrasound results of the Donor fetus in case 2

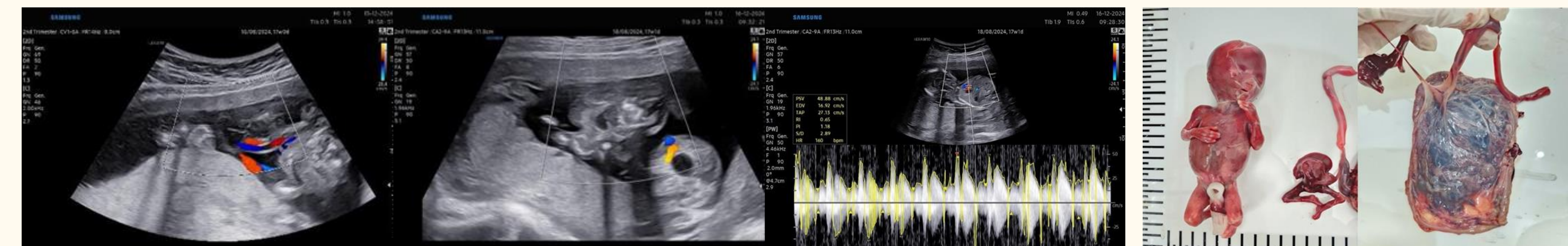


**Figure 9.** Ultrasound results after laser coagulation acardiac twin case 2



**Figure 10.** Picture of the fetus and placenta post partum in case 2

## DISCUSSION

This case series reports two different acardiac twin pregnancies with varying gestational ages. The first case was diagnosed at 31 weeks of gestation with a complication of polyhydramnios. After amnioreduction, an emergency caesarean section was performed. The second case was diagnosed earlier, at 12 weeks of gestation, which allowed for the opportunity to do fetal intervention. At 17 weeks of gestation, we attempted laser coagulation on the abdominal aorta of the acardiac fetus. According to the literature, early intervention in acardiac twin pregnancies, particularly 16-18 weeks, can reduce technical difficulties, improve placental blood flow, and prevent heart failure in the affected fetus.

## CONCLUSION

Early diagnosis of acardiac twins is crucial because it allows doctors to closely monitor the condition of the healthy twin and plan appropriate treatment. Appropriate management can increase the chances of survival of the donor fetus and reduce the risk of maternal complications.

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