

Fetus Compressus in Dichorionic Diamniotic Twin Pregnancy

Authors

Raheela Naz^{1*}, Sonia Arnowalt², William Taylor³, Bramara Guruwadayarhalli⁴,
Srividhya Budithi⁵

1. Clinical fellow, 2. Specialty Doctor, 3,4, 5. Consultants, Obstetrics and Gynaecology, Wrexham Maelor Hospital
*draheela.naz@gmail.com

Objective

To highlight the implications of spontaneous fetal reduction in a Dichorionic Diamniotic (DCDA) Twins pregnancy and antenatal management.

Case report

- A 32-year-old primigravida conceived with In Vitro Fertilization (IVF) ,had transfer of two frozen embryos.
- Live DCDA twins were confirmed on dating scan. (figure 1)
- She had few episodes of vaginal bleeding in first trimester, but Ultrasound showed live twins. (figure 2)
- Ultrasound at 18 weeks revealed demised first twin and a viable 2nd twin. (figure 3)
- Parents were informed of the scan findings and were counselled of the potential risks to the surviving twin.
- Ultrasound at 19 weeks revealed cervical funnelling which was managed conservatively with progesterone pessaries .
- The growth scan at 23weeks revealed an Amniotic band with no entrapment(figure 4), but subsequent scans were normal.
- At 33weeks and 5days, she presented with preterm premature rupture of membranes and the fetus in transverse lie, which resulted in Caesarean delivery of a healthy, normally grown baby.
- Placenta showed Fetus Compressus and histology showed changes associated with hypoxia .(figure 5,6)

Figure 1 showing Lambda sign
DCDA twins



Figure 2 showing Live DCDA
Twin pregnancy At 12w & 5d



Figure 3 Twin A Small lower sac with
oligohydramnios and no fetal heart



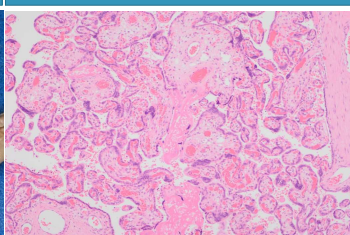
Figure 4 ,Arrow showing Amniotic
band at 23 weeks



Figure 5 Fetus Compressus



Figure 6. placental histology showing
changes associated with hypoxia



Discussion

- Single fetal loss in the second or third trimester of pregnancy is rare and it is associated with increased morbidity and mortality of the surviving co-twin in addition to psychological stress to parents.
- This condition is associated with preterm labour, intrauterine growth restriction and pre eclampsia.
- In IVF pregnancies, single fetal loss is estimated to occur in up-to 30% of pregnancies and causes are usually placental insufficiency, placental abruption, intrauterine growth restriction, pre-eclampsia, twin–twin transfusion, discordant growth.
- Identification of the cause, monitoring the surviving co-twin, deciding the appropriate time of delivery is challenging.
- In DCDA twins, the prognosis for the surviving co-twin is good, but prematurity is the main risk factor.
- In case of continuation of pregnancy, the demised twin will progressively transform into “fetus papyraceus or fetus Compressus” due to the absorption of the soft tissues, placental and amniotic fluids.

Conclusions

The prognosis, monitoring and outcome of a single fetal demise in a twin pregnancy are very much dependent on the gestational age of diagnosis, placentation, and gestation at delivery.

Reference:
Stefanescu BI, Adam A-M, Constantin GB, Trus C. Single Fetal Demise in Twin Pregnancy—A Great Concern but Still a Favourable Outcome.