Case Report

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Monochorionic Twins with One Fetal Death

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ABSTRACT

28 years old pregnant women with parity G_{0000} was diagnosed with monochorionic twin gestation with one foetal death. Ultrasonogram revealed twin gestation with one foetal death with features of foetal Hydrops with Foetal Growth Restriction (FGR) in the live fetus. Close monitoring of the patient done with serial (biweekly) USG and weekly coagulation profile. She developed GHTN with GDM during her stay in hospital for which she received antihypertensive drugs and Metformin. She also received antenatally corticosteroids for foetal lung Maturity. Caesarean section was performed at 34 weeks of gestation, and normal new-born infant was discharged without any complications. We report a case of Monochorionic twins with one foetal death with complications mainly due to vascular anastomosis and unequal placental sharing causing Twin Twin Transfusion Syndrome (TTTS) which mainly predispose to foetal growth restriction and the consequences of co-twin death.

Keywords: *Twin twin transfusion syndrome, gestational hypertension, gestational diabetes, monochorionic twins*

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INTRODUCTION

The incidence of multiple gestation is approximately 3.5 per 1000 births worldwide [1, 2] and 0.9-1% in India [3]. Monochorionic twins occur in 0.3% of all pregnancies [4]. Twin with one twin foetal death as one of the most common complications of monochorionic placenta. There is a 30-50% risk of death for the surviving twin with a high risk of the mother developing DIC while continuing pregnancy [5]. Survival of the living twin without maternal complication is a challenge to an obstetrician. This is a case of one twin foetal death with monochorionic placenta managed conservatively at Central Referral Hospital (CRH) by close maternal and foetal monitoring.

CASE REPORT

Primigravida at 30week of pregnancy by Last Menstrual Period (LMP) and 24weeks (by early week scan) with twin gestation came for antenatal check-up on her first visit at CRH. Her previous USG showed twin gestation with features of as cites along with pericardial effusion and scalp edema in one of the fetuses. To know the foetal viability and amnionicity, her USG was repeated which showed twin gestation with one foetal death with features of foetus hydrops and foetal growth restriction in live foetus. Patient and family member counselled about the complications of the one foetal death. Patient closely monitored with serial (biweekly) USG and weekly coagulation profile. During her serial monitoring she developed Gestational hypertension and gestational diabetes. She started on tablet Labetalol 300 mg/day and Metformin 1gm/day along with diet control. On her serial USG there was growth restriction of the live fetus from 30 weeks in POG (by early USG scan). Patient was admitted for monitoring BP and foetal well-being. Corticosteroids were given for fetal lung maturity and she underwent elective LSCS on 31/08/18 at 34 weeks of POG (by early USG scan).

She delivered a live baby girl, weighing 1.9kg and a dead girl, weighing 550grams. Her postoperative period was uneventful and the patient discharged on postoperative day 4 with a healthy baby.

DISCUSSION

In almost all monochorionic twins, there is a shared circulation in the placenta with different anastomosis which could be Artery-Vein, Vein-Vein, Artery-Artery anastomosis. Complication mainly due to vascular anastomosis and unequal placental sharing causes Twin Twin Transfusion Syndrome (TTTS) which mainly predispose to foetal growth restriction and the consequences of co-twin death. Single fetal Death can cause morbidity and mortality in the co-twin due to their shared placental circulation of a monochorionic twin or intrauterine environment that caused death of both

twins. Donor is characterized by hypovolemia, oligohydramnios, growth restriction, abnormal Doppler in umbilical artery. Effects of single foetal death in monochorionic twins are acute Hypotension, anaemia, ischaemia in the co-twin due to exsanguination into the low-pressure vascular system of the decreased twin, resulting in morbidity (neurologic impairment 10-30 %) and death (10 %). Treatment at higher centres for TTTS are Fetoscopy Laser Coagulation, Amnio-Reduction, Septostomy mainly.

CLINICAL RELEVANCE/CONCLUSION

Previously live foetus in pregnancy with one foetal death were sacrificed to prevent complications to the mother. In recent times, with advancement in investigative tools and improved obstetric care, women with one twin fetal death can dream of having a healthy child even in a centre not specialized in high-risk pregnancy. Close foetal and maternal monitoring can play a major role in the management.

REFERENCES

1. Cohn, Meredith et al. (2015). "Rare identical triplets born to Baltimore couple". Baltim. Sun. Archived from the original on October 24,
2. Echeverry CJ. (2008) Multiple Gestation. In: Arias F, Daftary SN, Bhide AG (Eds). Practical Guide to High-Risk Pregnancy and Delivery A South Asian Perspective, 3rd edition. New Delhi: Elsevier; Pp. 293-322.
3. Norwitz, E. R., Edusa, V., & Park, J. S. (2005, October). Maternal physiology and complications of multiple pregnancy. In *Seminars in perinatology* (Vol. 29, No. 5, pp. 338-348). WB Saunders.
4. Cordero, L., Franco, A., Joy, S. D., & O'shaughnessy, R. W. (2005). Monochorionic diamniotic infants without twin-to-twin transfusion syndrome. *Journal of Perinatology*, *25*(12), 753-758.
5. Jain, D., & Purohit, R. C. (2014). Review of twin pregnancies with single fetal death: management, maternal and fetal outcome. *The Journal of Obstetrics and Gynecology of India*, *64*(3), 180-183.