



CASE SERIES OF TWIN TWIN TRANSFUSION SYNDROME AND RESPECTIVE OUTCOMES

Obstetrics & Gynaecology

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KEYWORDS

INTRODUCTION:

Twin-Twin transfusion syndrome occurs in multiple gestations and involves the chronic flow of blood from one twin to its co-twin. The syndrome usually occurs in monochorionic twins, who themselves have a very high rate of complications including severely preterm delivery, fetal growth restriction, fetal death, and twin-twin transfusion syndrome [1]. The mortality rate of twin-twin transfusion syndrome is high, ranging from 40% to 70% [2].

Vascular connections in the placenta between both twins are necessary for twin-twin transfusion syndrome to develop [3]. Vascular anastomoses are present in virtually 100% of monochorionic twin pregnancies, whereas twin-twin transfusion occurs (with rare exception) in 5-10% of monochorionic pregnancies [4],[5]. The progressive nature of twin-twin transfusion in utero is thought to be due to one twin (the donor) who slowly pumps blood to the other (the recipient) through the placental vascular anastomoses. The reason for the occurrence of twin-twin transfusion syndrome in only a small proportion of the monochorionic twin pregnancies with vascular anastomoses is unknown. The intraplacental anastomosis is usually situated in a single, shared cotyledon of the common placenta [6], and is usually arteriovenous but maybe arterial-arterial [7]. We hereby present case series of similar patients.

CASE:

Patient 1 – 30y female presented with amenorrhea of 8 months with RH Negative pregnancy, her ultrasound showed ongoing twin pregnancy with polyhydramnios with severe oligohydramnios suggesting possibility of twin twin transfusion syndrome, her antenatal period was uneventful and presented at term with labour pains LSCS was done one twin was delivered healthy was kept in NICU on non invasive ventilatory support and the baby recovered well. second twin was not able to survive, spalding sign was present (fig 1). patient had sepsis and deranged LFTs she was managed conservatively for the same she recovered completely in 2 days was discharged in stable condition.

Patient 2 – 28 Y female presented with bleeding PV preceded by amenorrhoea of 4 months, her previous scans showed features of twin twin transfusion syndrome. Emergency termination of pregnancy was done in view of excessive bleeding PV. neither of the twins survived both were extremely premature for survival (fig 2). The family was economically weak they could not opt for non invasive treatment modalities that are available for TTTS.



Figure 1



Figure 2

DISCUSSION:

The Quintero staging system is widely used for identifying TTTS severity.

Stage 1 requires an imbalance of fluid between the donor (<2 cm) and the recipient (>8 cm) and serves as a baseline requirement for all of the following stages.

In Stage 2, the bladder of donor twin is no longer visible.

Stage 3 includes critically abnormal Doppler velocimetry in either fetus.

Stage 4 presents with hydrops in either fetus; and finally, stage 5 is the demise of one or both fetuses (8)

Polyhydramnios comprises the oligohydramnios–polyhydramnios sequence in which the donor fetus has too little amniotic fluid (oligo) and the recipient fetus possesses too much (poly)—a complication directly caused by TTTS (9). Symptoms of polyhydramnios can include sudden abdominal swelling and weight gain (10). Correspondingly, anecdotal reports indicate that symptoms of TTTS include sensation of rapid growth of the womb; a uterus that measures large for dates; abdominal pain, tightness, or contractions; sudden increase in body weight; and swelling in the hands and legs in early pregnancy (11). In a case series, Sueters et al examined the value of serial ultrasound examinations in conjunction with instructing patients to report the maternal symptoms of rapidly increasing girth and/or premature contractions. In 2 of the 4 cases presented, patients reported feeling rapidly increasing girth which was predictive of a TTTS diagnosis (12)

Amnioreduction, laser photocoagulation these modalities are available but not readily acceptable and not so economically feasible for lower middle class families. Many families are unaware of these modalities and some who are aware of these are not ready for the explained risks.

CONCLUSION:

The dilemma of opting the available treatment options of TTTS management has kept many families from adopting the methods, being a

developed nation there should be enough counseling and assurance that is expected out of any new modality that a family would like to adopt for their coming generation. Economic ill sustainability is costing many lives .these new inventions has to be made economically sound so that families can easily execute their expenses to a way of betterment.

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