Delayed Interval Triplet Delivery

Joveria Sadaf,^{1*} Aslam Mahmood Malik¹

ABSTRACT

The management of triplet pregnancy remained a challenge. In women with premature rupture of membrane of one of the fetuses poses threat to others as well. Various methods have been proposed to delay the uterine contractions and improve lung functions of fetuses. This report describes management provided to a woman who conceived with assisted fertilization and had triplet pregnancy. We were able to save two of the three fetuses.

Key words Triplet pregnancy, Cervical cerclage, Premature rupture of membranes, Tocolysis.

INTRODUCTION:

According to the literature intentional delayed delivery of the second fetus in a twin pregnancy is of rare occurrence. The increased use of assisted reproductive techniques during the last 10 to 15 years has resulted in an increase in its incidence too.¹ There is absence of agreement regarding the best management of these pregnancies. Each case is a unique medical situation that must be met with the best possible solution. The use of prolonged bed rest, cervical cerclage, tocolysis, antibiotics and corticosteroids are commonly used though their use is debatable.^{2,3} We report our experience of managing a rare case of delayed delivery in a triplet pregnancy.

CASE REPORT

A 21-year old primigravida, conceived with ovulation induction after one and half year of her marriage. Her pregnancy was confirmed by urine pregnancy test. On her booking scan in second month she was informed of having a triplet pregnancy. Her first trimester was complicated with hyperemesis gravidarum for that she had to be admitted twice in hospital. She had no history of fever and discharge, flu like symptoms or rash in first trimester. She was also told that all the babies had their own bag of membranes and placentae (Figure I).

¹. Department of Obstetrics & Gynaecology Shahida Islam Medical and Dental College Lodhran

Correspondence:

Dr. Joveria Sadaf^{1*} Department of Obstetrics & Gynaecology Shahida Islam Medical and Dental College Lodhran E mail : joveriasadaf@gmail.com



Fig I: Early pregnancy trans abdominal ultrasound of the patient showing tri-amniotic tri-chorionic triplet pregnancy of 6 weeks and 6 days

During her second trimester she started feeling fetal movements in the beginning of fifth month of pregnancy. Anomaly scan done was also done. She had complaint of mild off and on pains and vaginal discharge for that she was given vaginal passery. She took multivitamin and iron tablets during second trimester. She had all her investigations done which were reported as normal. She remained well till the mid of her seventh month of gestation when painful contractions was reported. She took anti spasmodic drugs for relief of symptoms.

She later presented with the complaint of labor pains for three hours. She was tocolysed and steroid injection was given to improve fetal lung maturity. Later in night she had ruptured membranes. She delivered one of the triplets, a baby girl, early in the morning next day of admission. Her cord was cut close to the uterus and placenta was left inside. A Macdonald's rescue cervical cerclage was applied. She was tocolysed with oral nifedipine and remained admitted in labor ward. She was put on antibiotics. Baby was admitted to neonatal ICU and died two days later. Patient herself remained well for subsequent five days when she again started feeling labor pains. Her cervical cerclage was removed and she delivered remaining two of the triplets' one girl and a boy at 31 weeks and 5 days of gestation. Both were admitted in NICU and discharged on day 5 and 7 respectively and are alive and healthy with no perinatal complications.

DISCUSSION

Our management of the case reported proved successful in terms of survival of mother and her two siblings without any complication. The most common complication of multi-fetal pregnancy is the pre-term labor and pre-term pre-labor rupture of fetal membranes, with one condition often leading to the other. A possible reason for the premature rupture of the membranes could be an ascending infection from the vagina or the cervix into the uterine cavity. It commonly occurs when there is already some degree of cervical dilatation which may be due to cervical incompetence or increased intra-uterine pressure.^{1,4} Both infection and rupture of the membranes can lead to uterine contractions and subsequent delivery.^{5,6}

If cervical cerclage is decided, it is advised to perform under aseptic condition following a tocolytic therapy. It should be applied within two hours of delivery, provided the labor pains have stopped completely. The umbilical cord should be tied with an absorbable suture as close to the cervix as possible and then cerclage applied with nonabsorbable suture. Both the expediency and the effectiveness of this action is a matter of dispute among the obstetricians. It is recommended that the women should stay in the bed.⁶

For the suppression of pre-mature contractions, tocolytics can be used either in the form of betamimetic, magnesium sulphate, nifedipine, oxytocin receptor inhibitors or non-steroidal anti-inflammatory drugs. Tocolysis can be given for prevention and suppression of uterine contractions, but never in presence of chorioamnionitis.

We used this approach hence the uterine contractions ceased immediately after the birth of one triplet and there was no sign of infection. We therefore applied cervical cerclage with polypropylene suture. To potentiate its effect tocolysis was added and bed rest advised. Dexamethasone was given for the lung maturity of the remaining two triplets and meanwhile antibiotic was used to prevent infection of the retained placenta and cord. This approach not only prolonged the pregnancy but also decreased the morbidity of the remaining two fetuses. It also provided time for maternal corticosteroid prophylaxis.

CONCLUSION:

Intervention with tocolysis, antibiotics, and cervical cerclage after delivery of the first fetus is a reasonable option for some patients with multi-fetal pregnancies and premature rupture membranes in the second or early third trimester.

REFERENCES:

- Reinhard J, Reichenbach L, Ernst T, Reitter A, Antwerpen I, Herrmann E, et al. Delayed interval delivery in twin and triplet pregnancies: 6 years of experience in one perinatal center. J Perinat Med. 2012;40:551-5.
- Arabin B, Van Eyck J. Delayed interval delivery in twin and triplet pregnancies: 17 years of experience in 1 perinatal center. Am J Obstet Gynecol.2009 ;200:54.e1-8.
- Fayad S, Bongain A, Holhfeld P, Janky E, Durand-Réville M, Ejnes L, et al. Delayed delivery of second twin: a multicentre study of 35 cases. Eur J Obstet Gynecol Reprod Biol. 2003;109:16-20.
- Arias F. Delayed delivery of multi-fetal pregnancies with premature rupture of membranes in the second trimester. Am J Obstet Gynecol.1994;170:1233-7.
- De Jong MW, van Lingen RA, Wildschut J, van Eijck J. Delayed interval delivery of two remaining fetuses in quintuplet pregnancy after embryo reduction: report and review of the literature. Acta Genet Med Gemellol (Roma).1992;41:49-52.
- Udealor PC, Ezeome IV, Emegoakor FC, Okeke DO, Okere PC. Delayed Interval Delivery following Early loss of the leading twin. Case Rep Obstet Gynecol. 2015;2015:213852.

Received for publication: 17-01-2020

Accepted after revision: 30-06-2020

Author's Contributions: Joveria Sadaf: Manuscript writing Aslam Mahmood Malik: Data collection.

Conflict of Interest: The authors declare that they have no conflict of interest.

Source of Funding: None

How to cite this article:

Sadaf J, Malk AM. Delayed interval triplet delivery. J Surg Pakistan. 2020;25(3):131-3. Doi:10.21699/jsp.25.3.9.