

# Triplet Pregnancy

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**Summary:** Triplet pregnancy is a relatively uncommon event. Eleven cases of triplet pregnancy were reported in 5 years with an incidence of 1: 2660. Only 3 patients reached 37 weeks of gestation. Caesarean section was done in 5 cases. There were 4 stillbirths and 7 neonatal deaths. Incidence of antenatal and postnatal complications was high.

## Introduction

The incidence of triplet pregnancy has increased significantly over the last decade with introduction of various new reproductive techniques using ovarian stimulation. Triplet pregnancy becomes a high risk pregnancy with increased incidence of preterm delivery, abnormal presentation and other antenatal, intranatal and postnatal complications. The perinatal mortality is 5-6 times higher in such pregnancies (McFee et al, 1974). It also has psychological, social & economic implications, particularly in the postdelivery period.

## Materials & Methods

A retrospective analysis of 11 cases of triplet pregnancy was done over a period of five years, at LTMG Hospital, Sion, Mumbai. Triplet pregnancies resulting in abortions (weights of all 3 foetuses less than 500 gms.) were not included in this series. All cases were analysed with respect to antenatal complications, mode of delivery and perinatal outcome. The possible steps to improve foetal outcome in such cases is discussed.

## Results

There were 11 triplet pregnancies amongst the 29276 total deliveries during the last 5 years at our hospital giving an incidence of 1: 2660.

Seven of them were registered cases while 4 were transferred cases. Eight cases were diagnosed antenatally by ultrasonography, while in 2 cases the diagnosis was made in early labour. In one unregistered transferred case, diagnosis was made at the time of caesarean section.

Most of our patients were in the age group of 20 – 30 years. There were 3 primigravidas and 8 multiparas (Table –I). Two patients had received clomiphene citrate for

ovulation induction while one gave family history of twin pregnancy.

All antenatally diagnosed patients were advised bed rest, tocolytics, and weekly steroids. Cervical cerclage was done in one patient. Three of these patients reached 37 weeks of gestation, while 2 patients delivered before 28 weeks (Table –I).

Anaemia (Hb < 9gms.), hydramnios, PIH, APH were common antenatal complications detected in these patients (Table –II). Similar results were reported by Holeberg and Biyale (1982) and Reddy Rani and Arora (1994). In labour, abnormal presentation is another problem with triplet pregnancies, requiring operative intervention. The incidence of breech and transverse lie in the second and third fetuses is high (Table –I).

Six patients delivered vaginally, of these, one required internal podalic version to deliver the third fetus in transverse lie, while in one other patient, forceps was used to deliver the first fetus.

In one case, caesarean section was done after vaginal delivery of the first fetus, the indication being cord prolapse with oblique lie of the second fetus, with breech presentation in the third. Apart from this, caesarean section was done in 4 patients for indications like abnormal presentation of first of the triplets, failure to progress and severe PIH. In one transferred patient in whom caesarean section was done for large baby with failure to progress, intra-operative diagnosis of triplet pregnancy was made. Perinatal outcome in these pregnancies is shown in Table –I. There were 4 stillbirths and one fetus paperaceous. There were 7 neonatal deaths mostly due to prematurity and respiratory distress syndrome.

Of the 33 babies, 7 weighed less than 1500 grams, and 8

Table I  
Basic data, mode of delivery and perinatal outcome

No.	Age (yrs)	Parity	POG (wks)	Presentation	Mode of delivery	Perinatal outcome		
						F1 (gms.)	F2	F3
1	27	Primi	34	Vx/ Vx/ Vx	Vaginal (forceps for FI)	A/2200	A/1900	A/1650
2	19	G2	28	Vx/ Br/ Br	Vaginal	A/ 1250	A/1200	ND/900
3	23	G2	37	Br/ Br/ Tr	LSCS	A/ 2350	A/ 1850	A/ 2000
4	25	Primi	38	Vx/ Vx/ Br	LSCS	ND/1750	A/1800	SB1350
5	25	G2	27	Vx/ Vx/ Br	Vaginal	ND/ 950	SB/ 750	SB650
6	26	G3	32	Vx/ Br/ Vx	Vaginal	SB/ 1650	A/1450	FP(200)
	20	G2	33	Vx/ Vx/ Tr	Vaginal (IPV for F3)	ND/ 1350	A/1700	A1600
8	21	Primi	34	Vx/oblique/Br	Vaginal -F1 LSCS -F2, F3	A/ 1500	A/ 1450	A/ 1400
9	23	G3	34	Oblique/ Vx/ Br	LSCS	A/ 2100	A/ 1600	ND/ 1350
10	26	G5	38	Vx/ Br/ Tr	LSCS	A/ 2650	A/ 2150	A/ 2300
11	25	G2	31	Vx/ Vx/ Br	Vaginal	A/ 1300	ND/ 1450	ND/ 1350

## Abbreviations:

A – alive ND – neonatal death SB – stillbirth FP – Fetus papyraceous.

Table – II  
High risk factors and complications

No	Pr series (%)	Holeberg (%)	Rani Reddy (%)
1 Anaemia	46	29	50
2 PIH	28	46	33
3 Hydramnios	-	-	83
4 Preterm Labor	73	97	67
5 APH	19	10	50
6 PPH	28	13	50
7 Sepsis	19	13	33

Abbr: Pr – present.

weighed between 1550 to 2000 grams.

PPH and puerperal sepsis occurred in 3 and 2 patients respectively, but there was no maternal death.

## Discussion

The incidence of triplet pregnancy has increased gradually and significantly since the introduction of various assisted reproductive techniques, and use of ovarian hyperstimulation. The incidence varies between 1:425 (Nigeria) to 1:25000 (Japan). The incidence in our series was 1:2660. Though Daw (1987), found that 1/3<sup>rd</sup>

cases of triplet pregnancy had history of ovulation induction, such a history was elicited in only 2 patients in our study. The incidence of antenatal, intranatal, and postnatal complications, namely, PIH, antepartum haemorrhage & PPH is very high in such patients. (Daw, 1987). Though literature mentions a high incidence of hydramnios in such patients, (Rani Reddy and Arora, 1994) we did not come across it.

High incidence of preterm labour and low birth weight leads to a high perinatal mortality and morbidity. Our perinatal mortality was 33.5% and was comparable to that in other studies (Rani Reddy and Arora, 1994). Diagnosis can be made on clinical suspicion or by ultrasonography in late first or second trimester. In the 3<sup>rd</sup> trimester or in early labour, diagnosis can be made by ultrasonography or X-Ray, which will also give a clue about the presentations, thus helping in deciding the mode of delivery. Early diagnosis can help in prolonging pregnancies by early admission, rest, tocolytics, steroids and prophylactic cerclage.

Abnormal presentation is a major problem during labour, posing a dilemma over the mode of delivery and leading to a high incidence of operative interference. Holeberg et al (1982), advocated routine use of caesarean section

for triplet pregnancy, as it improved neonatal outcome significantly. Perinatal and neonatal outcome will also depend on the facilities available for neonatal care.

Thus, early diagnosis, rest, tocolytics, prevention of infection, liberal use of caesarean section, and lastly, a good neonatal intensive care unit will go a long way in decreasing the perinatal mortality in triplet pregnancy. Antenatal counselling, psychological support and proper lactation advice will prepare the mother in rearing three babies.

In the last few years, selective reduction of higher order multifoetal pregnancy has developed as a solution to reduce the high mortality associated with this condition. Generally, this is done in cases of four or more foetuses, and not in triplet pregnancy. The procedure is done between 9 and 11 weeks under ultrasound guidance. The selected foetuses receive intracardiac potassium chloride injection. Usually, two foetuses are left undisturbed. The procedure has its own complications. Apart from ethical problems, technical failure, commencement of uterine contractions and introduction of infection are the common

complications. The likelihood of losing all the foetuses is as high as 30%. When the figures about foetal survival in triplet, quadruplet & quintuplet pregnancies are contrasted with the risk associated with selective foeticide, it becomes difficult to support a decision to reduce the number of foetuses in pregnancies with fewer than 5 foetuses. (Berkowitz and Lynch, 1988).

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