

TRIPLET PREGNANCY

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SUMMARY

Triplet pregnancy is an uncommon event. Six cases of triplets seen were reported. Four delivered between 32 and 37 weeks of gestation and two delivered at 26 weeks. Commonest complications were anaemia, hydramnios, PIH and pre-term labour. Two patients underwent Caesarean section. Fetal survival mainly dependent on the gestational age rather than the mode of delivery. Early diagnosis and good antenatal management will decrease the complications and improve the fetal survival.

INTRODUCTION

Triplet pregnancy is a rare even in routine obstetric practice, although, it has become more frequent (1 in 1000) because of therapy for induction of ovulation (Holcberg et al, 1982). Triplet pregnancy presents serious obstetric problems because of difficulties connected with early diagnosis, increased incidence of delivery complications and a five fold neonatal mortality among the newborn (McFee et al 1974). Most importantly, delivery of triplets may present psychologic, social and economic factors. In this report we

analyse our experience in the management of triplet pregnancy.

MATERIAL AND METHODS

A retrospective and prospective study of triplet pregnancies over a period of sixteen months (January 1992 to April 1993) was done. Only 6 were cases of triplet pregnancy out of 4940 pregnancies managed during the period. Antenatal complications, mode of delivery and post natal outcome are studied.

RESULTS

Six cases of triplet pregnancies were seen (1 in 823) at our hospital during the study period. Five cases were diagnosed

prenatally by Sonography and in one it was missed as one of the triplet was fetus papyraceous.

All the patients were in the age group of 20-30 years. Only two of our patients received Gonadotrophins and Clomiphene for induction of ovulation. Four patients were regularly monitored and were put on bed rest, low dose aspirin and tocolytics. Two patients could be monitored only for 48 hours before they went into pre-term labour.

The Commonest antenatal compli-

cation was hydramnios (Table I) followed by anaemia and pre-term labour. Malpresentations are more common in triplets. Three of our patients had vertex, breech and vertex. Mode of delivery was Caesarean in two patients and vaginal in the remaining four. One patient had previous bad obstetric history with two neonatal deaths. She was found to have bicornuate uterus. The indication for Caesarean in the other patient was severe PIH. Operative delivery was conducted at 37 weeks of gestation in

Table I

Antenatal and Postnatal Complications

S. No.	Complication	Present series (%)	Holcberg (%)
1.	Hydramnios	83.33	-
2.	Pre-term labour	66.67	97
3.	Anaemia < 10 gn/dl	50	29
4.	PIH	33.3	46
5.	Antepartum bleeding	50	10
6.	PPH	50	13
7.	Sepsis	33.3	13

Table II

Mode of Delivery and Perinatal Outcome

S. No.	Gestational age (weeks)	Mode of delivery	Term	Perinatal Outcome			Neonatal death
				Preterm	Alive	Still born	
1.	37	LSCS	3	-	3	-	-
2.	37	LSCS	3	-	3	-	-
3.	36	Vaginal	-	3	3	-	-
4.	32	Vaginal	-	3	2	1	-
5.	26	Vaginal	-	3	2	1	2
6.	26	Vaginal	-	3	3	-	3

Total perinatal deaths : 7

both the patients. There were no neonatal deaths in these two cases.

Four patients delivered vaginally, two of them at pre-term and within 48 hours of admission, in spite of tocolytics. Both had acute hydramnios and one patient also had abruption. One baby was still born and the remaining 5 died within 8 hours because of prematurity. Table II shows the mode of delivery and perinatal outcome in all the six patients.

PPH and sepsis were encountered in 3 and 2 patients respectively, however, there were no maternal deaths.

DISCUSSION

The incidence of triplet pregnancies has increased significantly since the introduction of ovulation induction therapy. It varies between 1 in 425 (Nigeria) and 1 in 25000 (Japan). In the present series it was 1 in 823. The reported incidence was highest among black races and lowest in mongoloids. A third of the cases occurred in women with artificial induction of ovulation (Daw 1987). Two of our patients had received treatment for induction of ovulation and the rest were spontaneous ovulation.

Early diagnosis is important for the improvement of fetal salvage in triplet pregnancy. The diagnosis can be made by Sonography during the first trimester of pregnancy; the most reliable means, however, of diagnosing a triplet pregnancy is an abdominal x-ray during the late second or third trimester (Mc Fee et al 1974). When performed close to labour this x-ray will also show the presentation of fetuses.

Antenatal and postnatal complications

(Table I) are very high in these cases. These include Anaemia, hydramnios, PIH, Antepartum bleeding, PPH, Sepsis and pre-term labour (Holcberg et al 1982). The primary problem of triplet pregnancy is pre-term labour. In the present series delivery occurred in 4 patients between 32 to 37 weeks of gestation and in 2 at 26 weeks. The other main problems are PIH and intra uterine growth retardation. The main challenge in the management of triplet pregnancy is to prolong the gestation as long as possible. Holcberg et al (1982), felt that hospitalisation, bed rest may not only delay the onset of labour and improve placental blood flow, but also allow immediate attention should labour commence. In the present series all the patients were admitted to the hospital after diagnosis till delivery. Itzkowic (1979) in his study of 59 triplet pregnancies reported 4 cases of threatened abortion in which pregnancy continued and delivered at 28, 34, 38 and 38 weeks and ten of the twelve babies survived. We had two cases of threatened abortion in 1st trimester, pregnancies continued to 36 and 37 weeks and delivered with all 6 babies being alive.

There is wide controversy regarding mode of delivery. Daw (1978) in a series of 14 triplet pregnancies found spontaneous breech delivery to have highest mortality rate particularly for the 2nd and 3rd baby. He suggested that most triplets be delivered by Caesarean section. Holcberg et al (1982) and Itzkowic (1979) also reported no neonatal deaths in infants delivered by Caesarean section where as they reported significant neonatal deaths in infants delivered vagi-

nally. It was difficult to compare these two groups as the gestational age was shorter for the vaginal deliveries as compared to Caesarean section (30.1 versus 35.2 weeks). The neonatal outcome of triplets is related primarily to maturity of the infants and it was recommended that vaginal delivery be allowed except in cases where there is an obstetric indication. Two of our patients had Caesarean section at 37 weeks for obstetric indications and all the six babies were alive. Two patients had pre-term vaginal delivery at 26 weeks. One baby was still born and the remaining 5 died within 8 hours because of low birth weight. Two patients had vaginal delivery at 32 and 36 weeks. One of the babies was fetus papyraceous and the remaining 5 were alive and well. Holcberg et al (1982) reported combined still birth and neonatal mortality rate of 312/1000 for patients delivered vaginally and 32/1000 for those delivered by Caesarean section. Within a given gestational age group the route of delivery does not affect perinatal mortality. In the above series (Holcberg et al 1982) it was found that perinatal outcome was better in induced ovulation than in spontaneous ovulation. In two of our patients who had induced ovulation all the six babies were alive, although one baby had cleft lip and palate. The better survival appears to be

due to early diagnosis, prolonged hospitalisation and planned delivery. With modern perinatal management more than 80% triplets will survive without any major handicap (Gonen, et al 1990).

CONCLUSION

With the introduction of ovulation inducing agents incidence of multiple gestation has increased. This condition poses problems because of diagnosis, complications in labour and increased neonatal mortality. Early diagnosis with prolonged bed rest and other preventive measures may avoid premature labour. Outcome depends more upon gestational age than mode of delivery. However some argue that liberal use of Caesarean section improves the survival rate particularly where there is malpresentation of the first fetus.

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