

**AFRICAN JOURNAL OF
MEDICINE**
and medical sciences

VOLUME 31, NUMBER 3, SEPTEMBER 2002



**EDITOR:
B. O. OSOTIMEHIN**

**ASSISTANT EDITOR:
A. O. UWAIFO**

ISSN 1116 — 4077

Sixty-one day twin to twin birth interval in a low technology setting

AA Odukogbe, OA Adesina, IA Babarinsa, RA Onifade and IF Adewole

Department of Obstetrics and Gynaecology, University of Ibadan, Ibadan, Nigeria

Summary

Multiple pregnancy, whether spontaneous or from artificial reproductive techniques, is regarded as high risk. Limiting the twin-twin birth interval to within 30 minutes has been widely practised. However, conservative management of the retained live, immature second twin may be worthwhile. We report a case lasting sixty-one days in a low technology setting.

Keywords: *Twins, birth interval, sixty-one days*

Résumé

Grossesse multiples, soit spontanée ou par les techniques de reproduction artificielle sont considérées à haut risques. Limitant la naissance des jumeaux à 30 minutes d'intervalle a été largement pratiqué. Cependant, la gestion conservatrice des vivres retenues second jumeau prématuré peut être satisfaisant. Nous reportons un cas qui a duré 61 jours dans un environnement avec une technologie peu avancée.

Introduction

Multiple pregnancy presents peculiar high-risk obstetric problems in pregnancy and during delivery [1]. Its incidence varies widely around the world with the West African subregion recording the highest rates before the widespread use of assisted reproductive techniques. In Nigeria, rates of 45 twin pairs per 1000 livebirths were documented in the southwestern parts- (the World's highest then) [2].

The second twin is prone to more complications than the first which is in part related to the twin to twin delivery interval, traditionally considered to be prolonged if it exceeds 30 minutes.

However, Trivedi and Gillet in 1998 [3] reviewed 45 case reports in which birth intervals of 48.9 ± 37.9 days were achieved with resultant live second twins or triplets.

At our center in the South West of Nigeria, we are reporting to the best of our knowledge the longest documented birth interval in a set of twins in the subregion.

Case report

Our patient was a 30 year old, G2P1+0, 2 alive (a set of twins), who was booked on the 15th of December 1999 at a gestational age of 17 weeks, 5 days. Her present pregnancy had been uneventful.

In her first pregnancy, she had spontaneous, premature vaginal delivery of a set of live female twins at the gestational age of 34 weeks and 5 days in 1996. The first twin weighed 2.3kg while twin II weighed 2.15kg.

The ultrasonographic examination done in the index pregnancy on the 25th of October 1999 showed live twin intrauterine gestations at 10 weeks and 3 days with separate sacs. This pregnancy was uneventful until she spontaneously expelled a dead female first twin in a private hospital at a gestational age of 25 weeks and 2 days on the 3rd of February 2000.

Correspondence: Dr. A.A. Odukogbe, Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria. E-mail: obgynuch@skannet.com.ng or uchmed@skannet.com.ng

We subsequently admitted her into our ward for conservative management of the retained second twin on the 8th of March 2000 at a gestational age of 29 weeks and 2 days. Routine maternal and fetal vital signs were done regularly.

The serial packed cell volumes, clotting profiles and white cell counts were normal. Ultrasonography done following an episode of vaginal bleeding at 30 weeks 6 days showed low-lying placenta.

This conservative management with bed rest, Clavulanate-potentiated amoxicillin (Augmentin) tablets and regular fetal kick chart monitoring was continued until she had a repeat episode of profuse vaginal bleeding for which an emergency caesarean section was done on the 4th of April 2000, 61 days after the delivery of the first twin. The gestational age of the second twin was 33 weeks and 2 days.

The baby was a male who weighed 2.15 kg with Apgar scores of 5 at 1 minute and 8 at 5 minutes and was nursed in the Special Care Baby Unit (SCBU). The postoperative period was largely uneventful for both mother and baby. Both were discharged to the postnatal and children's outpatient clinics, respectively.

Discussion

Multiple pregnancy, a classical high-risk pregnancy has been of great concern to obstetricians past and present, in the latter case because of the resurgence in its incidence occasioned by the assisted reproductive techniques [4], and the use of ovulation induction drugs.

The complications of multiple pregnancy result mainly from heightened physiological changes of pregnancy and problems peculiar to it such as those from monozygosity [1]. These problems include twin to twin transfusion syndrome and locking during delivery.

Various methods have been employed to deal with these problems including cervical cerclage to prevent preterm birth and prompt delivery of the second twin within 30 minutes of the delivery of the first twin.

However, conservative management of the live but immature retained second twin is gaining wide acceptance [5] especially in the developed countries with sophisticated maternofetal monitoring devices, such as regular biophysical profile and cardiotocographic assessments. In the low technology, low socioeconomic setting like Nigeria, the increased risk of sepsis, antepartum haemorrhage and the cost of hospitalization and investigations [5] may hamper such conservative approach. In cases where this can be easily afforded, regular biophysical profile measurements will adequately assess fetal wellbeing.

Our patient had antibiotic therapy [6] to prevent infections and her haematological investigations were repeatedly normal. Prophylactic tocolytics were not used because of the low-lying placenta with its attendant risk of antepartum haemorrhage. With these, the pregnancy was allowed to continue till the 33rd week. At this age the baby had improved chances of survival.

This case illustrates our efforts to manage these cases despite the constraints of poor finances and inadequate facilities

at our disposal. Further studies will be carried out to determine the criteria for choosing patients to be managed conservatively, what antibiotics to use, what dose and by what route they should be given, and the advisability of using tocolytics.

Acknowledgements

We are grateful to Dr. H. J. A. Ogidi who referred this patient to our service.

References:

1. Crowther CA. Multiple pregnancy. In: High-risk pregnancy. Management options. Eds: D. K. James, P. J. Steer, C. P. Weiner, and B. Gonik. Chapter 9 pages 129-152. W. B. Saunders-Publishers, London.
2. Nylander PPS. and MacGillivray I. In: Human Multiple Reproduction. (MacGillivray I., Nylander P. P. S and Corney G. eds.), p. 137. W. B. Saunders, London.
3. Trivedi AN and Gillet WR. The retained twin/triplet following a preterm delivery-an analysis of the literature. *Australian and New Zealand Journal of Obstetrics and Gynecology*, 38 (4): 461-5, 1998.
4. Anonymous. ACOG educational bulletin. Special problems of multiple gestation. *International Journal of Gynaecology and Obstetrics*. 64(3): 323-33, 1999
5. Kalchbrenner MA, Weisenborn EJ, Chyn JK, Kaufman HK and Losure TA. Delayed delivery of multiple gestations: maternal and neonatal outcomes. *American Journal of Obstetrics and Gynaecology* 179(5): 114-9, 1998.
6. Giannacopoulou C, Matalliotakis I, Hatzidaki E. Giannacopoulous K, Hassan E, Loutridis D and Koumantakis E. Conservative treatment of multiple pregnancies after delivery and a fetal miscarriage: two case reports. *Clinical and Experimental Obstetrics and Gynaecology*. 25(1-2): 54 -5, 1998.