J Obstet Gynecol Ind Vol. 53, No. 4 : July/August 2003 Pg 393-394

# Single Fetal Demise in Multiple Gestation

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**Key words :** intra-uterine fetal death, twin pregnancy

## Introduction

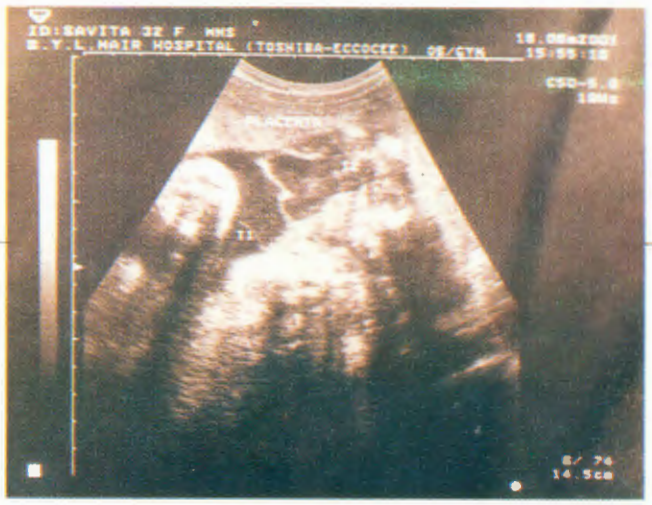
Antenatal single fetal demise in a multiple gestation is a condition posing therapeutic dilemma with an incidence of 2-6% of the multiple gestation. The autolysis of the dead fetus sets in the process of consumptive coagulopathy, which might even necessiate heparin therapy for the mother[1,2]. The risks of infection and emotional disturbance to the mother are also of great concern. The surviving twin suffers from increased perinatal morbidity and mortality due to thromboembolic necrosis of various organs like brain, kidney and liver due to transfer of thrombogenic material across the placenta[3]. The overall risk of brain damage for the surviving fetus is 1:600 of monozygotic gestation[4]. However Pritchard and Ratnoff[5] have postulated that a period of about 4 - 5 weeks elapses before the derangement of clotting system becomes overt. Hence continuation of pregnancy till period of viability is considered to be the prudent approach.

## Case Report

Mrs. SPG, a 30 year old, G4P1L1A2 presented with four months amenorrhea and pain in the abdomen. On examination her general condition was fair, vital parameters were normal with mild pallor and uterus 20 to 22 weeks in size with external ballotment and minimal fetal activity. Per vaginum, the cervix was short and midposed with os closed.

The patient was admitted in the antenatal ward, given complete bed rest and administered tocolytics. Routine ultrasound showed a diamniotic dichorionic type of twin gestation with twin I of 18 weeks and twin II of 14 weeks with fetal cardiac activity being present in both. There was no obvious congenital anomaly in any of the twins. Complete hemogram of the patient showed megaloblastic anemia which was treated with Vitamin B12 injections, and folic acid supplementation.

The patient was later followed on OPD basis at regular intervals of 15 days. A repeat scan at seven months amenorrhea showed twin I (live) in vertex presentation with 27 weeks of gestation and Twin II corresponding to 22 wks with absent cardiac activity (Photograph 1).




**Photograph 1** : Crumpled appearance of Twin II with a membrane separating it from the live Twin I

The patient was admitted in the antenatal ward. In view of prematurity of twin I, a decision was taken to continue the pregnancy after explaining its consequences to the patient and her relatives. The patient was continued on tocolytics and injection dexamethamine was given weekly. Baseline coagulation profile showed platelet count 1.7 lakhs/ml, serum fibrinogen 285 mg% and prothrombin time within normal limits. These were repeated every week with NST being done biweekly.

Patient went in spontaneous labor at 36 weeks delivering a male fetus of 2.55 kgs with Apgar 8 at one and 5 minutes and a macerated still born male fetus weighing 450 gms. The baby had an uneventful neonatal period. The mother and baby were discharged on the fifth day of delivery. No abnormality was seen in the placenta and umbilical cord.

## Discussion

Whenever a fetus dies in utero in a twin pregnancy at 26-28 weeks of gestation, continuation of pregnancy is

*Paper received on 27/11/01 ; accepted on 20/5/02*

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an accepted mode of management. It needs weekly monitoring of coagulation profile of the mother and daily fetal movement count and biweekly NSTs for the fetal assessment. Postpartum, the placenta should be routinely checked for chorionicity, infarction and for velamentous cord insertion cord knotting and constriction should be looked for. One of these could have been the etiological factor for fetal demise. The dead fetus may have a congenital anomaly or a chromosomal defect. The neonate, if symptomatic, should be screened for lytic foci in brain, kidney etc by MRI. Careful follow-up in infancy is desirable.

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