

UNEQUAL TWIN : CASE REPORT

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Sometimes one of the twin is smaller than the other, but it is a rare phenomenon. Recently we found a twin pregnancy in a woman of 29 years, para 3, gravida 4th who complained of discomfort due to huge abdominal swelling. Ultrasonography (USG) revealed mild degree of bilateral hydronephrosis, normal hepatobiliary system, and gravid uterus with twin live fetuses of unequal sizes : biparietal diameter (BPD) 51 mm, femur length (FL) 31 and 23 mm. By menstrual history, she is running about 21 weeks of pregnancy, which corresponds to the bigger twin, but the smaller twin corresponds to about 17 weeks of pregnancy. Both the fetal hearts are beating regularly, but the smaller one is feeble and may not survive. Amniotic fluid is excessive in amount. The patient is being followed up.



Big head



Small head

DISCUSSION

Twin gestations occur once in every 85 births. Superfetation or hypercyesis is the fertilization of two ova in the same uterus at different menstrual periods within a short interval. Upto 40% of twin pregnancies are undiagnosed prior to labor and delivery. when twins are diagnosed by ultrasound early in the first trimester, in about half of these cases, one twin will silently abort and this may or may not be accompanied by bleeding. This has been termed the vanishing

twin. The incidence of birth defects in each fetus of a twin pregnancy is twice than in singular pregnancies.¹ Monochorionic pregnancies carry the risk of placental vascular anastomoses. These, if severe, may result in conditions such as the twin-twin transfusion syndrome and be seen in cases of parabiocytic twinning (acephaly-acardia). Monoamniotic twins are at risk of entanglement of the umbilical cords and vascular compromise of both fetuses.² The commonest com-

plication of monochorionicity is a 5-30% risk of developing the twin transfusion syndrome (TTS).³ Unbalanced shunting of blood through placental vascular anastomoses can induce growth retardation and anemia in the donor twin while causing hydrops and polycythemia in the recipient twin.⁴ A severe form of this syndrome is the so-called 'stuck-twin' phenomenon, which occurs when the donor twin develops severe oligohydramnios and growth retardation and becomes trapped against the uterine wall by the small amniotic sac encasing it. The rarest complication in TTS is an acardiac twin (1 in 35000 deliveries). Pregnancy-related causes of polyhydramnios include congenital infections and the twin-twin transfusion syndrome (TTS). Cytomegalovirus, toxoplasmosis, listeriosis and congenital hepatitis are a few of the viral diseases that may infect a pregnancy and cause polyhydramnios.⁶ Sonographic clues that suggest infection include growth retardation and fetal cranial or liver calcifications. TTS is an uncommon entity caused by communication between the placental circulations of twins. This condition results in polyhydramnios in smaller twin. Heart failure and pericardial effusion may be present in the donor twin with TTS. A donor twin died five days after Doppler examination despite reduction amniocentesis of the polyhydramnios twin.⁷ The umbilical cord in the compromised twin showed reversal of diastolic flow. Twin reversed arterial perfusion sequence is a rare malformation with an incidence of 1 in 50000 pregnancies and results from a monochorionic twin pregnancy in which one twin has a severe abnormality involving the head and upper part of the body with a rudimentary heart. It is also caused by placental anastomotic connections leading to reversal of blood flow to one twin. Maternal indomethacin therapy may control the polyhydramnios and periodic monitoring of the pregnancy by USG should be done until delivery.⁸ The growth of one twin may serve as a marker for the growth of the other-BPD of the twins should be within 5 mm or 5% of each other and any discrepancy should not increase by greater than 3 mm over a two week period-only 77% of

growth-retarded fetuses was detected using these criteria in 1981.⁹ Using the interval growth of the femurs (FL) might be of greater value.¹⁰

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