EARLY DIAGNOSIS AND FOLLOW-UP OF TWIN PREGNANCY USING A TWO-DIMENSIONAL ULTRASONIC SCANNER

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A two-dimensional ultrasonic B scanner, the Nuclear Enterprises Diasonograph, is used to diagnose both single and multiple early pregnancy. The contact scanning method is used. The patient is required to have a full bladder if she is under 14 weeks gestation. The uterus and the cervix are outlined. Then a search is made for the gestation sac or sacs within the uterine cavity if the cyesis is under 10 weeks. Serial longitudinal and transverse scans are carried out to outline the gestation sacs. The fetal echoes within the gestation sac are seen and the fetal heart rate can be detected using the time-position display (TP).

The patients that are studied fall into the following groups: (1) patients who are clinically suspected to have multiple pregnancy; (2) patients who have been on ovulation induction therapy; (3) patients with family history of twins; (4) patients with threatened abortion.

The diagnosis of multiple pregnancy during the 11th week is equivocal. After the 12th week gestation, the diagnosis is made by visualising the fetal head and the maturity is then estimated by measuring the biparietal diameter.

Thus fetal growth can be assessed by carrying out serial biparietal diameter estimations.

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RITODRINE HCL FOR THE PREVENTION OF PREMATURE LABOR IN TWIN PREGNANCIES

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The perinatal mortality (PNM) rate for twin gestation is in the range of 15%, and

this high perinatal mortality rate is due predominantly to prematurity, although twins may also be born growth retarded. Ritodrine HCl, a beta sympathomimetic drug, has been shown to be effective, both in stopping premature labor and in preventing intrauterine growth retardation. With this in mind, a double-blind study using ritodrine HCl or placebo was begun in order to study its effect on premature labor, intrauterine growth retardation, and the PNM rate in twins.

As soon after 20 weeks as the diagnosis of twins was made, the patient was entered into the study after an initial screening. Patients were then followed closely in the antepartum period with 24-hour urine estriol determinations, biparietal ultrasound measurements and antepartum fetal heart rate and uterine contraction monitoring. Continuous fetal heart rate and uterine contraction monitoring was also done in the intrapartum period. At birth, the infants were evaluated with Apgar scores, cord blood gases, and at 24 hours of age a gestational age estimation using the Dubowitz The infants are to be followed closely for five years with developmental tests. Thus far, 30 patients have delivered and have been followed to 6 weeks postpartum. Although the results on individual patients have remained blinded to the investigators, an initial evaluation of the drug (ritodrine) and control (placebo) groups have revealed no difference with respect to gestational age, birth weight, or perinatal mortality. These preliminary results are not significant. However, it appears that ritodrine HCl is a safe oral agent for the antepartum gravida and her fetus. The study will be continued until approximately 100 patients have been enrolled.

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A CASE OF SIMULTANEOUS INTERSTITIAL BILATERAL PREGNANCY

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Twin pregnancies may present tubal involvement in the following cases: (1) simulta-