Assessment of Gestational Age by Dr. Konald Prem

McDonald and Fish elsewhere in this issue comprehensively discuss the prenatal assessment of intrauterine growth retardation. They correctly point out that infants with a birth weight of less than 2500 grams account for 75% of all neonatal deaths. Those infants also are at increased risk for cerebral palsy and other adverse neurologic sequelae.

A very important factor in assessing infant mortality risk is gestational age, since it has been shown that for any constant birth weight the mortality rate decreases as gestational age increases. The importance of determining the gestational age is emphasized by a detailed discussion of the techniques that have been developed to estimate the duration of pregnancy. The clinical observations such as the date of the last menstrual period and Naegele’s rule, estimation of uterine size by palpation or measurement, the dates of quickening and engagement of the fetal head and auscultation of the fetal heart tones with the head stethoscope all have inherent inaccuracies well known to every obstetrician. The interpretation of the biochemical and biophysical methods such as estriol, ultrasound, and phospholipids are more parameters of fetal well being or growth retardation rather than an accurate measurement of gestational age.

In high risk pregnancy complicated by medical problems such as diabetes, hypertension, renal disease, and a whole host of other less common maternal conditions, the obstetrician, generalist or internist who is aware of the maternal condition should caution the individual to seek preconceptional consultation to establish full awareness of the hazard of the maternal condition to the well being of the fetus, and convey to her the importance of knowing at all time during pregnancy the exact duration of gestation. To insure this, those women who are contemplating pregnancy should be instructed in the potential value of the basal body temperature graph to determine the exact date of conception. Not only will this knowledge be invaluable for the high risk pregnancy, but it will be invaluable if the pregnancy is complicated by toxemia, placenta previa, or other unanticipated complications resulting from the pregnancy itself.

Because ovulation may be delayed or occur erratically in the first cycles after discontinuance of oral contraceptive pills, every woman who discontinues this medication to become pregnancy should be instructed in basal body temperature recording to identify the time of ovulation and hence the date of conception.

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