

MULTIPLE-PREGNANCY DURATION

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Pregnancy duration was examined in 389 multiple pregnancies out of 29,656 general deliveries. Mean duration of multiple pregnancy appears to be 258.5 days, i.e., 23.1 days shorter than general pregnancy, which is statistically significant ($t = 32.16$, $P < 0.001$).

There is high linear positive correlation between fetal weight and length, and between these and maternal abdominal circumference. A highly significant multiple correlation exists between fetal weight and length and maternal abdominal circumference in multiple pregnancy.

Obstetrical assistance being only limited to cases exceeding the so-called Naegele's term, nearly one-half of parturient women are denied the obstetrical assistance they need during the decisive period of beginning delivery (Klimek 1970).

In multiple pregnancy (which, as is known, is of shorter duration than single pregnancy) delivery may require special obstetrical procedures (Milewicz 1965, Sternadel 1968). Parturition often begins unexpectedly, before Naegele's term. Waiting for the "term of delivery" is one of the main causes of the greater frequency of pathologic conditions after delivery of multiple pregnancies.

Pregnancy duration was calculated in 389 multiple pregnancies (out of 29,656 general deliveries) in which live fetuses were at least 35 cm in body length and weighed more than 1000 g. Eleven per cent of the women were unable to give the exact date of their last menstruation. Statistical analysis was carried out by means of the Student's t test, the χ^2 test, and the correlation tables and Bravais-Pearson's r coefficient of linear correlation.

RESULTS AND DISCUSSION

The average pregnancy duration was 258.5 ± 24.8 days, ranging from 180 to 324. Of all deliveries, 72% occurred between days 234 and 283, i.e., within one standard deviation; 94% within two, and 99% within three standard deviations.

The analysis of the distribution of body weight of newborns I and II and of the abdominal circumference of the parturient women shows normal distributions and a significant correlation between the maternal and the newborns' selected parameters ($r = 0.48 \pm 0.05$). A multiple relation appears to exist between duration of pregnancy (as given by the women), body weight and length of fetus, and increment in maternal abdominal circumference as objective characters.

In view of the lack of similar data in the literature, an extensive analysis has been carried out.

According to the biological standards set forth by Klimek (1964), mean duration of pregnancy in general is 281.6 days with a standard deviation of ± 11 days. Only 217 of the 389 cases of multiple pregnancy that were analyzed (56%) were delivered within the normal interval of 258 to 303 days. The difference between the duration of multiple pregnancies and pregnancies in general is statistically highly significant ($t = 32.16$, $P < 0.001$).

Our standard deviation of the mean duration of multiple pregnancy was 24.8 days. This means that the normal time of delivery in multiple pregnancy extends over a period of 99 days, and 88% of deliveries occur before Naegele's term. Hence, there is a need for active obstetrical management, throughout this period, not only in the 11th and 10th, but also in the 9th lunar month of pregnancy.

Our data show that the physiologically shorter mean duration of multiple pregnancy cannot be relied upon. There is a highly significant difference in the term of physiological delivery in multiple pregnancy, amounting to 14 and not only 6 weeks as in pregnancy in general. There is a need for a more modern approach to the problem of multiple pregnancy, which may be already prolonged much earlier than single pregnancy. Methods for estimating the true term of delivery in multiple pregnancy, as well as methods for diagnosing multiple pregnancy, are required for the safety of mother and child. The variables characterizing the fetus have normal distribution.

Pregnancy may be prolonged regardless of the term of delivery in multiple pregnancy. Criteria of prolongation of multiple pregnancy require further investigation.

CONCLUSIONS

1. Mean duration of multiple pregnancy is 258.5 days, i.e., 23.1 days shorter than the duration of pregnancy in general, which is statistically significant ($t = 32.16$, $P < 0.001$).
2. There is a need for a more modern approach to multiple pregnancy, which may be prolonged much earlier than single pregnancy.
3. There is high linear positive correlation between fetal weight and length, and between these and maternal abdominal circumference. A highly significant multiple correlation exists between fetal weight and length and maternal abdominal circumference in multiple pregnancy.