

## **Determination of gestational age in multiple pregnancy: which fetal CRL should be used?**

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### **Objective**

In multifetal gestation, discrepancies in the crown rump length between multiple fetuses exist. There is lack of evidence regarding which fetal CRL should be used for estimation of gestational age when LMP (last menstrual period) date is not known and in history of irregular menstruation. Our aim was to determine whether the larger, smaller or the mean CRL is more accurate in determining the gestational age (GA) in the first trimester in multifetal pregnancy. The main objective of accurate dating in multiple pregnancies is to recognize and manage Growth restriction, deciding the timing of delivery and management of complications which are specific and more frequent in these pregnancies.

### **Methods**

This is a retrospective study of all normal multifetal pregnancies conceived by in vitro fertilization. The embryo transfer date was used for determination of the true gestational age. CRL dating charts by INTERGRW (derived from GE voluson E8 ultrasound machine) was used for reference. The values of the larger, smaller and mean CRL were compared with the reference CRL (which was at 50<sup>th</sup> % in INTERGRW chart) for the corresponding gestational age (according to embryo transfer date). The difference between the reference CRL and measured CRL was calculated. The CRL ( out of the larger, the smaller or the mean ) which closest to the expected reference values was calculated and approved. Exclusion criteria: 1) spontaneously conceived multifetal pregnancy : 2) multifetal pregnancy in which smaller, larger and mean CRL had same values: 3) multifetal pregnancies with 1 or more fetus having some anomaly.

### **Results**

Results: A total of 61 multifetal pregnancies were included in the study. According to INTERGRW chart, 4.91% of larger twin, 90.16% of smaller twin and 4.91% of mean CRL values were found closest to the reference value.

### **Conclusion**

The smaller CRL is more accurate in the estimation of the GA for multifetal pregnancy when compared to the larger or mean CRL values. The smaller CRL should be used for dating multifetal pregnancies.