

UNC Prenatal Diagnosis - Estimation of Gestational Age Ultrasound methods of confirmation of LMP-based EDC or to determine EDC

EGA \leq 13 6/7 weeks: CRL (crown-rump length)

CRL measured by the mean of three measurements obtained in a true midsagittal plane with genital tubercle and fetal spine longitudinally in view and the maximum length from cranium to caudal rump measured in a straight line

Tip: zoom image to allow CRL to be $\frac{1}{2}$ to $\frac{3}{4}$ of image, centered in the image *** mean sac diameter should not be used to estimate gestational age

EGA \geq 14 0/7 (or CRL > 84 mm): combined fetal biometry

Biometry includes: BPD (biparietal diameter), HC (head circumference), FL (femur length), **and** AC (abdominal circumference). Other biometry such as cerebellar diameter can support this estimate.

Pregnancy conceived via assisted reproductive technology (ART) : ART-derived EGA

For IVF: EDD = date of transfer + [280 – 14 – (day age of embryo at transfer)]

Gestational age range based on LMP	Method of measurement	Discrepancy between Ultrasound dating and LMP dating that supports revision of EDC
 < 8 6/7 wk 9 0/7 - 13 6/7 wk 	CRL CRL	 More than 5 days* More than 7 days
14 0/7 – 15 6/7 wk	BPD, HC, AC, FL	More than 7 days
16 0/7 - 21 6/7	BPD, HC, AC, FL	More than 10 days
22 0/7 - 27 6/7	BPD, HC, AC, FL	More than 14 days
> 28 0/7	BPD, HC, AC, FL	More than 21 days

Adjustment/redating of EDC based on US measurements

* 'more than' means that if the EGA from LMP = 5 days that the EDC does not change, if EGA is 6 days different then change EDC

Once the gestational age is determined by the 'best obstetrical estimate,' defined as LMP confirmed by ultrasound parameters above or by one of the above US parameters alone, the EDC should be documented as 'final,' should be reviewed with the patient, and should not be changed without careful consideration Reference:

- Method for estimating due date. Committee Opinion No 611. American College of Obstetricians and Gynecologists. Obstet Gynecol 2014; 124:863-6
- Ultrasound in pregnancy. Practice Bulletin No. 175. American College of Obstetricians and Gynecologists. Obstet Gynecol 2016;128: e241–56.

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Notification to Users

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

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