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

EGA ≤ 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 ½ to ¾ of image, centered in the image
*** mean sac diameter should not be used to estimate gestational age

EGA > 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)]

Adjustment/redating of EDC based on US measurements

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

*‘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:

Revised 10/9/2017
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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