Elective Deliveries Between 37 & 39 weeks of Gestation

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Objectives

- Describe the difference in gestational age between term, full-term, early-term deliveries
- Discuss at least two risks of early term elective deliveries for the neonate
- Discuss a benefit of delivering after 39 weeks for the mother and neonate

Establishment of Gestational Age

- Ultrasound before 20 weeks of gestation
- Documentation of fetal heart tones for 30 weeks using Doppler ultrasonography
- Confirmation that is has been at least 36 weeks since a positive pregnancy test has been obtained

ACOG, 2009
What Do You Think?

- How many weeks is a normal pregnancy?
  - 40 weeks

- When is the pregnancy considered term? At what gestational age is it safest to deliver an infant?
  - 37 weeks, 39-40 weeks

- What is the gestational age range that is considered early-term?
  - 37 weeks to 38.6 weeks

When Do Mothers’ Think a Pregnancy is Full-Term?

- Goldberg et al. (2009) 650 mothers
- 75% of mothers thought full term was between 34-38 weeks
- Over half of the mothers thought it was safe to deliver a baby between 34-36 weeks, only 10% thought it wasn’t safe until 39 weeks

What is Term Delivery?

<table>
<thead>
<tr>
<th>Week</th>
<th>Preterm</th>
<th>Early Term</th>
<th>Late Preterm</th>
<th>Post Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>28&lt;br /&gt;0/7</td>
<td>34&lt;br /&gt;0/7</td>
<td>37&lt;br /&gt;0/7</td>
<td>39&lt;br /&gt;0/7</td>
<td>41&lt;br /&gt;0/7</td>
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</tbody>
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Modified from drawing courtesy of William Engle, MD, Indiana University.
Case Study

R.S. is a 28 y.o. P0 AF who is currently 36 weeks pregnant. She has had no complications during her pregnancy and is requesting an induction of labor at 38 weeks. She states her family is coming in to town in 2 weeks and her husband is leaving for his residency in 3 weeks.

Everyone’s Doing It...

IT’S OK RIGHT?

An Increasing Request

Martin et al., 2007
Increase in number of Elective Inductions

- The rates of labor induction has more than doubled since 1990, from 9.5% to 23.1% in 2009 (Leapfrog, 2011)
- Tita et al. (2009) found that of 13,258 elective cesarean section deliveries, 35.8% were performed before 39 weeks
- In 2010, 57,000 babies were born before 39 weeks as a result of elective induction (Leapfrog, 2011)

Common Non-Medical Reasons For Elective Inductions

- Convenience
- History of fast labors
- Lives far from hospital
- Specific provider be in attendance
- Complaints concerning symptoms of late pregnancy
- Prior difficult labor
- Perceived lower risk for mother or infant
- Mother’s perception of low risk because further along in the pregnancy

Murthy et al., 2011

It’s OK….

RIGHT?
Elective Deliveries Between 37 and 39 Weeks

- NICU admissions
- Transient tachypnea of the newborn (TTN)
- Respiratory distress syndrome (RDS)
- Ventilator support
- Sepsis
- Newborn feeding problems

Engle & Kominiarek, 2008

Neonatal Outcomes

- MFM Network- comprised of 19 U.S. Academic Centers-evaluated 24,077 repeat cesarean deliveries at term
  - 13,258 deliveries were elective
  - 35.8% were before 39 completed weeks
    - 6.3% at 37 weeks
    - 29.5% at 38 weeks
  - Births at 37 weeks and 38 weeks were at an increased risk of adverse neonatal outcomes

Tita et al. 2009
Adverse Neonatal Outcomes

- Tita et al., 2009

Mother’s Are At Increased Risk Too

- Women who undergo an elective induction are more than two times more likely to experience a cesarean section
- Women who underwent elective induction also had greater blood loss and stayed longer in the hospital

Varda, Thombs, & Glantz, 2011
Engle & Kominiarek, 2008

Increased Medical Costs!

- There is a 17% increase in medical cost as a result of elective inductions before 39 weeks (Engle & Kominiarek, 2008)
- Nearly 1 billion dollars could be saved if we decreased our elective inductions to 1.7% (Leapfrog, 2011)
What Can We Do?

- Education
- Providers
- Patients
- Change the Process
- Toolkits
- Support
- Administration
- Healthcare Providers

Current National Campaign

- Professional Organizations
  - American College of Obstetricians and Gynecologists (ACOG)
  - American Academy of Pediatrics (AAP)
- National Quality Organizations
  - Joint Commission
  - Leapfrog
  - NQF Measures
- Insurance companies

Case study Follow-Up

- After giving the patient the facts regarding the possible risks to her newborn and discussing the hospital policy, she agreed to allow labor to occur without being induced prior to her due date.
- RS had a SVD at 39.2 weeks of a healthy 7lb baby boy. Her husband and visiting family were able to be present during the delivery.
Resources

Healthy Babies are Worth the Wait campaign
www.marchofdimes.com/professionals/medicalresources_hbww.html

Questions?

References


References…continued