Guidelines for Post-Term pregnancy Management

Background

Postterm pregnancy refers to a pregnancy that has extended to or beyond 42 0/7 weeks of gestation, e. g., 41 completed weeks or 294 days gestation (EDD + 14 days).

In pregnancies dated by first trimester ultrasound examination, the prevalence of postterm pregnancy is about 2 percent and fewer inductions are performed for postterm pregnancy than in pregnancies dated by last menstrual period.

Perinatal mortality (ie, stillbirths plus early neonatal deaths) at ≥42 0/7 weeks of gestation is twice that at term (4 to 7 versus 2 to 3 per 1000 deliveries). Maternal and neonatal morbidity is related, in part, to complications from fetal macrosomia. Fetal dysmaturity also results in neonatal morbidity.

Meta-analysis of 19 randomized trials showed routine labor induction at ≥41 weeks of gestation, e. g., 40 completed weeks, or 287 days gestation (EDD + 7 days) was associated with a significantly lower rate of perinatal mortality than expectant management. The benefits of routine induction are modest, however, and depending on their values and preferences, some women may choose to be managed expectantly.

In women wishing to avoid pharmacologic agents for cervical ripening and induction, membrane sweeping (also called stripping) reduces the proportion of patients who remain undelivered at 42 0/7 weeks. This was illustrated in the de Miranda RCT which randomly assigned low-risk women at 41 0/7 weeks of gestation to membrane sweeping every 48 hours or expectant management up until 42 0/7 weeks. Improved outcomes without adverse effects were reported with a number needed to treat (NNT) of 6.

Antepartum

- 1. At 41 0/7 weeks a review of the records is indicated to establish dates as well as possible. The patient can be categorized as having
 - a. 'good dates' (implying consistent measurement going back to the first or early second trimester) or
 - b. 'questionable dates'
- 2. Patients whose dates are 41 0/7 weeks or more can be referred for:
 - A. Antenatal testing
 - -Biophysical Profile (See Appendix 1)
 - B. Instruction in fetal kick counts
- 3. If the exam of the cervix is favorable, then induction can be considered at 41 0/7 weeks.

- 4. If the cervix is unfavorable at 41 0/7 weeks and antenatal testing is reassuring, then either cervical ripening or antenatal testing with reappointment to prenatal clinic in 3-4 days can be considered.
- 5. In women wishing to avoid pharmacologic agents for cervical ripening and induction, consider membrane sweeping between 41 0/7 weeks and 42 6/7.
- 6. Induction of labor after 42 0/7 weeks and by 42 6/7 weeks of gestation is recommended.
- 7. Consider for intervention from biophysical profile:

8-10/10 -no intervention, repeat 7 days or prn clinical situation

6/10 -equivocal: repeat in 24 hours

(if -2 for AF, then hydrate overnight per Oligohydramnios

Guideline))

0-4/10 -deliver, if results confirmed

- 8. Consider for delivery from other surveillance tests:
 - a. Non-reactive NST.
 - b. Positive contraction stress test (CST).
 - c. If oligohydramnios is noted, then treat as a separate issue (see Oligohydramnios Guideline)
- 9. Management of Suboptimally Dated Pregnancies
 - -Pregnancies without an ultrasonographic examination confirming or revising the estimated due date before 22 0/7 weeks of gestation should be considered suboptimally dated.
 - -The timing of indicated delivery in a woman with a suboptimally dated pregnancy should be based on the best clinical estimate of gestational age.
 - -There is no role for elective delivery in a woman with a suboptimally dated pregnancy.
 - -Amniocentesis for fetal lung maturity is not recommended as a routine component of decision making when considering delivery in a woman with a suboptimally dated pregnancy.
 - -During the antenatal care of a woman with a suboptimally dated pregnancy, please repeat an interval ultrasonographic assessment of fetal weight and gestational age 3–4 weeks after the initial ultrasonographic study. Although this follow-up examination is intended to support the working gestational age, interval fetal growth assessment potentially may detect cases of fetal growth restriction.
 - -Given concern that a full-term or late-term suboptimally dated pregnancy could actually be weeks further along than it is believed to be, initiate biweekly NSTs with a weekly fluid determination at 39 weeks of gestation.
 - -Late-term delivery is indicated at 41 weeks of gestation when gestational age is uncertain, using the best clinical estimate of gestational age.

-In a patient with a suboptimally dated pregnancy and a prior low-transverse cesarean delivery who requests a repeat cesarean delivery, delivery is advised at 39 weeks of gestation using best clinical estimate of gestational age.

Intrapartum

- 10. If fetus LGA, anticipate labor dysfunction, shoulder dystocia, postpartum hemorrhage.
- 11. Notify Peds as indicated per notification of pediatrician and pediatric nurse protocol.

Appendix 1

Criteria for the biophysical profile test

Nonstress test:

2 points if reactive, defined as at least 2 episodes of FHR accelerations of at least 15 bpm and at least 15 seconds duration from onset to return associated with fetal movement within a 30 minute observation period

Fetal breathing movements:

2 points if one or more episodes of rhythmic breathing movements of ≥30 seconds within a 30 minute observation period

Fetal tone:

2 points if one or more episodes of extension of a fetal extremity or fetal spine with return to flexion

Amniotic fluid volume:

2 points if a single pocket of fluid is present measuring at least 2 cm by 1 cm. (Appendix 2)

Fetal movement:

2 points if three or more discrete body or limb movements within 30 minutes of observation. An episode of active continuous movement is counted as one movement.

0 points are assigned for any criteria not met.

bpm =beats per minute; FHR = fetal heart rate.

Appendix 2

Technique for single deepest vertical pocket measurement

- a. Linear array transducer perpendicular to floor.
- b. Measure single deepest vertical pocket
- c. Avoid excessive abdominal pressure.
- Can measure to the top of cord or extremity but not below cord/extremity in those pockets with free fluid and occasional cord or extremity.

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