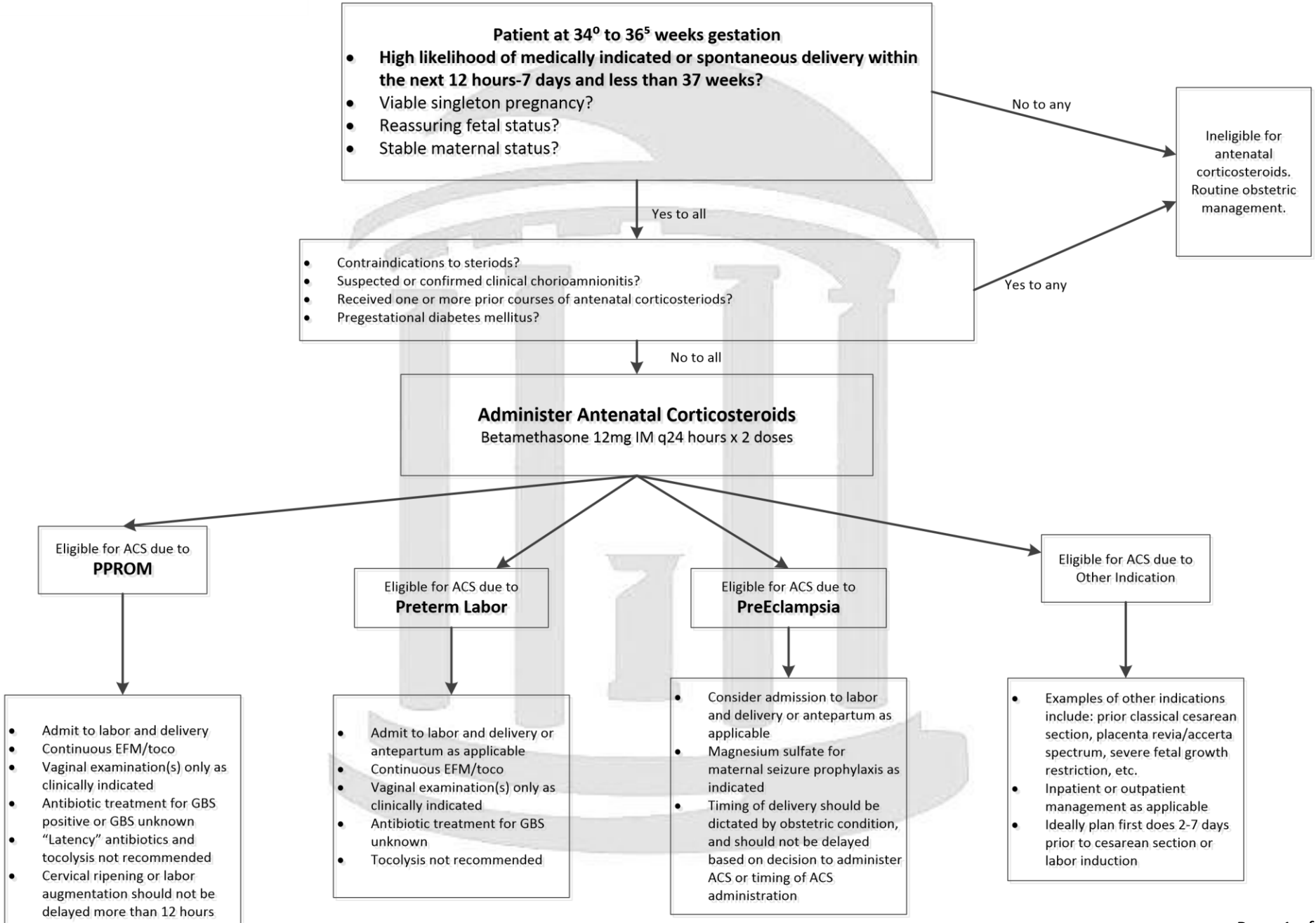
UNC SCHOOL OF MEDICINE

Antenatal Corticosteroids: Late Preterm



Abbreviations: ACS = antenatal corticosteroidsl PPROM= preterm (rupture of membranes): EFM = electronic fetal monitoring: GBS = group B strep ^Preterm labor admission critieria in original study: at least 6 contractions in 60 minutes AND either ≥ 3 cm dilated OR ≥ 80% effaced

Antenatal Corticosteroids in the Late Preterm Period-Notes and FAQ

- Q: Should a woman who is diagnosed with pre-eclampsia without severe features at 35 weeks be given ACS?
    - A: it is reasonable to consider ACS in this situation, if it is thought that there is a high probability that her clinical situation will worsen and she will need to deliver within 1 week. Clinical judgement should be used to decide the optimal timing of ACS administration, including whether or not it is indicated. If delivery is planned for 37 weeks gestation and low suspicion that her clinical condition will worsen. ACS may not be indicated.
- Q: Can a woman who is diagnosed with pre-eclampsia with severe features at 35 weeks be given ACS?

    - A: Yes, provided that it is anticipated that a minimum of 12 hours will elapse between first dose of ACS and delivery. In this situation, if the clinical condition warrants, it is reasonable to begin cervical ripening or labor induction at the time of diagnosis or hospital admission. Most women will remain undelivered 12 hours later, even if their labor induction is started at the time of admission. If cesarean delivery is anticipated, and a delay in delivery for at least 12 hours is contraindicated due to maternal and/or fetal status, then ACS should not be given.

- Q: Is maternal diabetes mellitus a contraindication to ACS use?

    - A: Women with pre-gestational diabetes mellitus were not included in the original study, and at this time, it is not recommended that they receive ACS at this gestational age. Women with gestational diabetes (even those requiring insulin) were not excluded from the RCT. Practitioners should remain vigilant regarding the potential for maternal hyperglycemia and adjust insulin doses in the short term (including initiation of an insulin drip or insulin sliding scale) as necessary to maintain euglycemia. Changes in insulin requirements may persist for up to 7 days following ACS administration.

- Q: Can a woman who previously received ACS <34 weeks be given another course of ACS?
    - A: No, The original RCT excluded women who previously received ACS<34 weeks gestation, and there is no evidence to support the use of rescue course ACS.

- Q: Should ACS be used in twin or higher order multiple gestations?

    - A: No. The original RCT excluded multiple gestations. At the current time, we do not recommend extrapolation to other populations including twins and other higher order multiple gestations.

- Q: What are the neonatal effects of antenatal corticosteroids at this gestational age?
    - The primary study found a reduction of neonatal respiratory morbidity, and a composite of severe neonatal respiratory morbidity, among nenoates exposed to antenatal betamethasone vs. placebo. Importantly, this effect was seen despite only 60% of the study population receiving the 2nd dose of study drug.
    - The only apparent adverse effect was an increase in initial neonatal hypoglycemia (defined as neonatal blood glucose <40). However, this appeared to be self-limiting as neonates who received betamethasone had a shorter time to first feed and had a significantly shorter length of stay in the special care/ neonatal intensive care nursery. Pediatricians should be notified regarding antenatal administration of corticosteroids, and neonates should be monitored post-natally as appropriate. It is important to note that hypoglycemia is a common complication in the late preterm period.

References

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