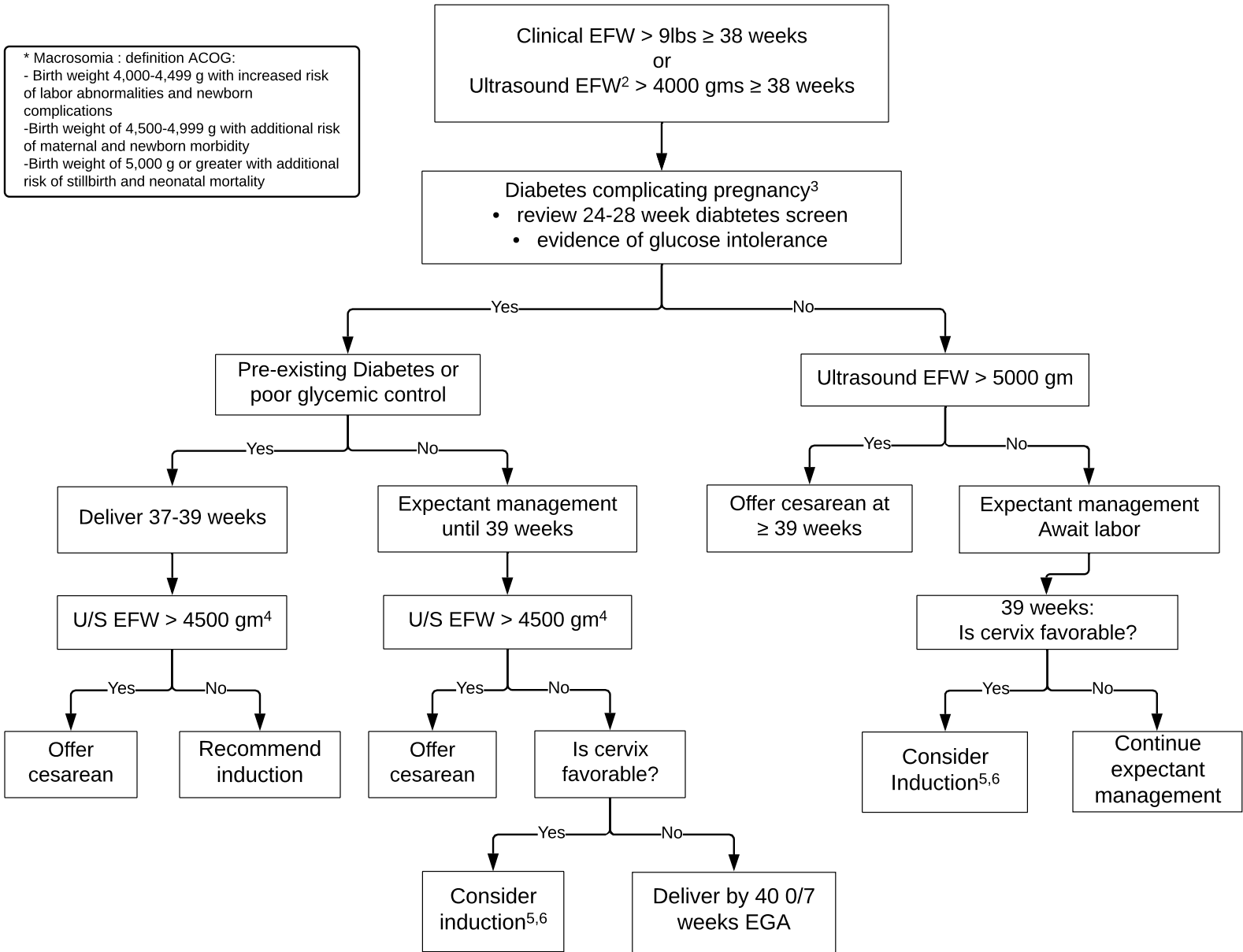


Macrosomia* Suspected: Delivery Planning¹

* Macrosomia : definition ACOG:
 - Birth weight 4,000-4,499 g with increased risk of labor abnormalities and newborn complications
 - Birth weight of 4,500-4,999 g with additional risk of maternal and newborn morbidity
 - Birth weight of 5,000 g or greater with additional risk of stillbirth and neonatal mortality



References

- 1) ACOG Practice Bulletin #22, November 2000, reaffirmed 2016. *Fetal macrosomia implies growth >4,000 or 4,500 gm regardless of gestational age. Large for gestational age implies birthweight >90th percentile for a given gestational age. The utility of ultrasound to predict birthweight >4,500gm is limited. Hadlock's formulas have 13% error. Among diabetic women, ultrasound biometry to detect macrosomia is 22-44% sensitive, 99% specific, PPV=30-44%, NPV=97-99%.*
- 3) ACOG Practice Bulletin #178, May 2017 *Maternal diabetes is an independent predictor of shoulder dystocia, clavicular fracture, and brachial plexus injury. Birthweight 4,500 in non-diabetics has been associated with rate of shoulder dystocia of 9.2% to 24%; in diabetic pregnancies 20% to 50%. At this time, and until the results of additional studies are reported, the American College of Obstetricians and Gynecologists continues to discourage induction of labor solely for suspected macrosomia at any gestational age.*
- 4) Rouse DJ JAMA 1996;276:1480-1486. *Decision analysis model estimated that using 4,500gm threshold for elective cesarean in women with diabetes, 443 cesarean deliveries would need to be performed to prevent one permanent brachial plexus injury.*
- 5) Boulvain M et al Lancet 2015; 385:2600-05. *Pragmatic RCT involving 822 women in 19 European centers, 37 0/7 to 38 6/7 with LGA infants, underwent induction or expectant management. No difference in cesarean rate. No brachial plexus injuries. Lower rate of shoulder dystocia (4% vs 8%). Study halted due to poor recruitment.*
- 6) Boulvain M, Irion O, Dowswell T, Thornton JG Cochrane Database Syst Rev. 2016. *Induction of labour at or near term for suspected fetal macrosomia. IOL for LGA is not associated with change in brachial plexus injury or cesarean rate; IOL is associated with lower birthweight, fewer birth fractures and less shoulder dystocia. NNT to prevent 1 fracture is 60 IOL.*

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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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