



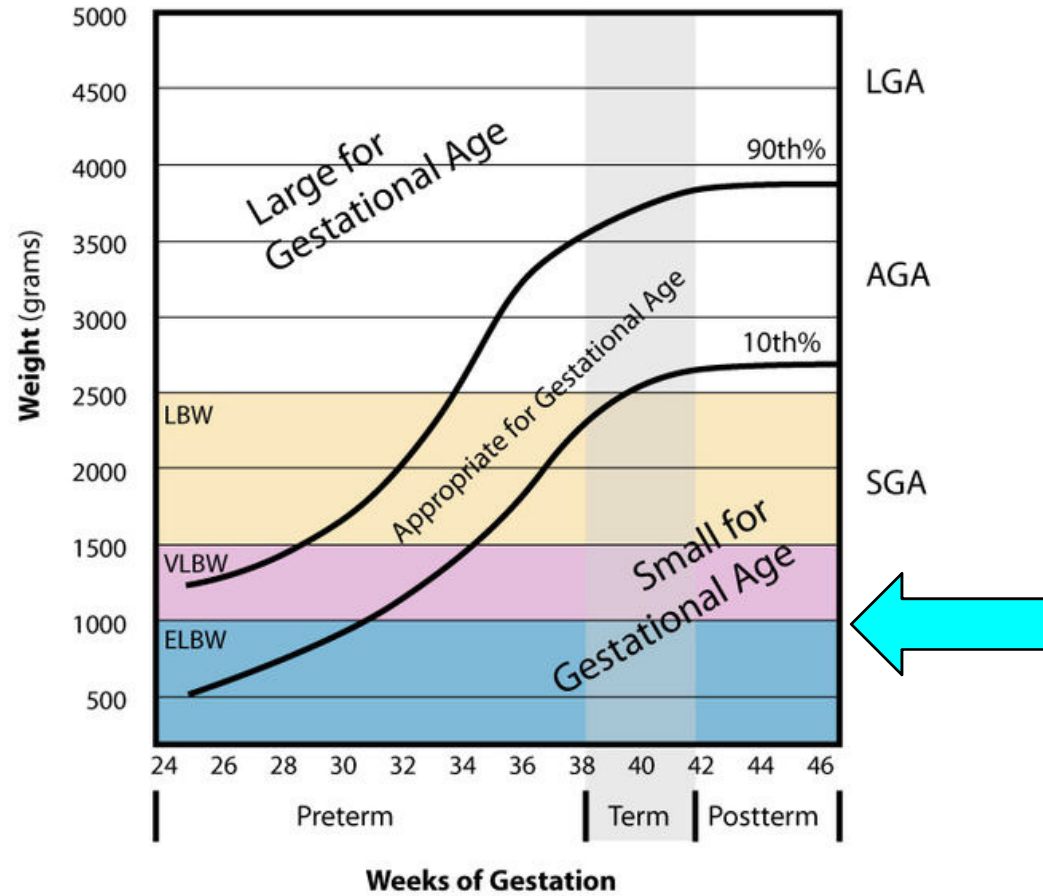
The Low Birth weight neonate

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LOW BIRTH WEIGHT

- Low birth weight (LBW) = $< 2.5\text{kg}$
- Very low birth weight (VLBW) = $< 1.5\text{kg}$
- Extremely low birth weight (ELBW) = $> 1\text{kg}$
- A large proportion of neonates $< 2.5\text{ kg}$ and almost all 1.5 kg are premature
- Different degrees influence outcome - LBW, VLBW or ELBW





Weight and gestation

- Newborns can be classified according to birth weight for gestation:
- Appropriate for gestational age = AGA
- Small for gestational age = SGA
(Birth weight below 10th centile).
- Large for gestational age = LGA

SGA - AGA - LGA

- IE Same gestation but different weights (wide spectrum ; 3rd - 97th)
- LGA ; infant of a diabetic mother, fetal response to hyperglycaemia with increased insulin & fat production
- AGA ; >10th OR < 90th
- SGA ; Both premature AND SGA has the worse prognosis

Growth restriction

- Intra-uterine growth restriction (IUGR)- a term used interchangeably with SGA
- Growth restriction in fetal life
- Classified as either symmetrical (both head and body) OR asymmetrical (head normal growth, body small)

Symmetrical vs asymmetrical

- Early insult
- Equal reduction in body & brain size
- Cause ; infection or congenital
- Fat, skin, packed cell volume, blood sugar & proteins normal
- Worse prognosis (abnormalities)
- Late insult
- Head & length OK but weight reduced
- Maternal factors, placental dysfunction, high maternal blood pressure
- Fat reduced, skin, packed cell volume, sugars & proteins abnormal
- Prognosis better (weight only)

Premature verses SGA?

- Understanding the difference is important to understand individual problems and to avoid confusion re; management
- Assessing the difference can be done by gestation assessment tools used to determine dates
- Same gestation, different weight?
- Same weight, different gestation

Further Reading

- Ballard tool for assessing gestational age
- <http://www.ballardscore.com/>
- SGA
- <http://www.merckmanuals.com/professional/sec19/ch272/ch272i.html>
- Ross (2013) Fetal Growth Restriction
- <http://emedicine.medscape.com/article/261226-overview>