# Large for Gestational Age in the Non-Diabetic Guideline

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**Brief Summary of Document:** Large for gestational age

**Scope**

**To be read in conjunction with:**

**Owning group** Obstetric Written Documentation Review Group
Reviews and updates

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<tr>
<th>Version no:</th>
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<td>1</td>
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Glossary of terms

<table>
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<th>Term</th>
<th>Definition</th>
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<td>LGA</td>
<td>Large gestational age</td>
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<td>SFH</td>
<td>Symphysis fundal height</td>
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Keywords

Large for gestational age, large for dates
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1. **INTRODUCTION**

The number of large newborns is on the increase. Over the last decade there has been a 15-25% increase in many countries in the number of women giving birth to large infants. This trend has been attributed to increases in maternal height, body mass, gestational weight gain, diabetes, reduced cigarette smoking and changes in socio-demographic factors.

The term large-for-gestational-age or macrosomia is a term used for a fetus or newborn with an estimated or actual weight >4500g irrespective of gestational age as both maternal complications and perinatal morbidity and mortality begin to rise from that birth weight.

In addition larger babies:

- carry a greater risk of developing type 2 diabetes later in life
- have an increased risk of breast cancer pre-menopause and
- have an increased risk of becoming overweight.

Excessive birth weight increases the risk of shoulder dystocia and caesarean birth substantially. It is important for clinicians to be aware of the risks associated with fetal macrosomia and be aware of the long-term implications.

2. **IDENTIFICATION**

Fundal height measurements are an inaccurate way of estimating fetal size. They are influenced by the maternal size, amount of amniotic fluid, status of the bladder, pelvic masses (e.g. fibroids), fetal position and many other factors.

Serial measurements are needed of the symphysis fundal height (SFH), adjusted for maternal variables such as age, weight, height, ethnicity and birth weight in previous pregnancies. This can significantly increase the antenatal detection of LGA babies.

To improve assessment of fetal growth it is critical that the SFH measurements are taken serially rather than done as a one-off measurement and LGA is suspected following two consecutive occasions.

Sonographic assessment of fetal weight is frequently inaccurate.

A holistic approach is required taking into account all the different variables.

Women with a history of one macrosomic infant are more likely to have another and a change in maternal BMI during pregnancy can predict fetal macrosomia.

Induction of labour for suspected macrosomia in non-diabetic women has not been shown to reduce the risk of caesarean section, instrumental delivery or perinatal morbidity.

3. **MANAGEMENT**

   **Antenatal Care**

   **Signs:**
• Greater than 2 standard deviations on SFH measurement or
• greater than 90th centile on the optimized SFH charts

on 2 consecutive occasions

Referral
• Refer to Consultant clinic
• USS to confirm growth and exclude polyhydramnios (arranged by clinic)
  ○ If growth is greater than 90th centile
  ○ And/or increased Liquor Volume (deepest pool greater than 10 cm or
    90th centile AFI for gestation)
  ○ GTT if not already recorded
  ○ If expected fetal weight is greater than 5kg:
    ▪ USS at term
    ▪ Plan management
    ▪ Offer elective LSCS

Care in Labour
Managing the delivery of large babies is challenging for clinicians. Elective caesarean section for the sole indication of macrosomia cannot be justified (see Referral above if expected weight is greater than 5kg).

First Stage
• Intravenous line, group and save
• continuous electronic monitoring of the fetal heart rate should also be performed because of the increased oxygen requirement of the fetus
• adequate pain relief
• regular 2 hourly assessment of progress is required, especially of descent of the presenting part
• Timely augmentation with oxytocin if delay in the first stage is diagnosed

Second Stage
• Early recourse to caesarean section if there is no descent of the presenting part
• Delivery by appropriately experienced midwife
• Thorough second stage assessment is crucial if it is prolonged in order to avoid forceful extraction by instrumental delivery
• Obstetric registrar or consultant in attendance
• Paediatrician should be present at the time of delivery (rates of shoulder dystocia are increased the larger the baby)
  • Prompt assessment and management are critical during labour.
Third Stage

- Active management of third stage and administration of Syntometrine

4. REFERENCES


NICE 2008 Antenatal Care CG62
NICE Sept 2007 Intrapartum Care CG55
NICE July 2008 Induction of Labour CG70