CONDITION

Small for gestational age

Small for gestational age means a baby is smaller than expected for the number of weeks of pregnancy.

WHAT IT IS
Birth weight below the expected range for gestational age

BODY SYSTEM
Pregnancy, placenta, and newborn growth

MAIN SYMPTOMS
Low birth weight, thin body, little body fat

WHAT CAUSES IT
Placental, maternal, fetal, inherited, or unknown factors

HOW IT IS DIAGNOSED
Birth weight plotted on a gestational-age growth chart

MAIN TREATMENT
Growth monitoring, feeding support, warmth, and complication management

CAN IT BE CURED?
No - birth size cannot change

IS IT AN EMERGENCY?
Sometimes - breathing trouble, seizures, or poor responsiveness

LONG-TERM OUTLOOK
Most grow well; some remain small or develop health problems

Overview

Small for gestational age, or SGA, means a baby's birth weight is lower than expected for the number of weeks of pregnancy. It is usually defined as a birth weight below the 10th percentile. This means the baby weighs less than about 90 out of 100 babies born at the same stage of pregnancy.

SGA describes size at birth. It is a condition, not a disease. Some babies are naturally small because of their family traits and are otherwise healthy. Others are small because something affected their growth before birth.

SGA is not the same as being premature or having a low birth weight. A premature baby is born before 37 completed weeks. Low birth weight means weighing less than 2,500 grams at birth, regardless of gestational age. A full-term baby can be SGA, and a premature baby can be the

expected size for their gestational age.

Fetal growth restriction, or FGR, is also different. FGR means a fetus has not reached its growth potential, often because the placenta is not working well enough. The placenta supplies oxygen and nutrients during pregnancy. A baby with FGR is often SGA at birth, but not every SGA baby had growth restriction.[1,2]

The distinction matters because growth restriction can raise the chance of problems during pregnancy and around birth. After delivery, SGA babies may need extra help with feeding, temperature control, and blood sugar monitoring.

Symptoms

SGA does not usually cause symptoms that a pregnant person can feel. It may first be suspected when the uterus measures smaller than expected during a prenatal appointment or when an ultrasound suggests that the fetus is small.

After birth, an SGA baby may have:

These features are not present in every baby. Some SGA babies simply look like smaller versions of other newborns.

Symptoms such as poor feeding, unusual sleepiness, shakiness, low body temperature, or breathing difficulty are not part of the definition of SGA. They may indicate a complication and need prompt assessment.

- A birth weight below the 10th percentile
- A thin body with less fat under the skin
- Loose, dry-looking skin
- A head that looks relatively large compared with the body

Causes and risk factors

Some babies are constitutionally small. This means their size reflects inherited family traits rather than a problem with the pregnancy. In other cases, growth may be affected by the placenta, the pregnant person's health, or a fetal condition. Sometimes no cause is found.

Placental problems can reduce the delivery of oxygen and nutrients to the fetus. These problems may occur with high blood pressure during pregnancy, including pre-eclampsia, or when the placenta is not functioning normally.

Other factors associated with an increased chance of SGA include:

Having a risk factor does not mean a baby will be SGA. SGA can also occur when none of these factors is present. It is not usually helpful to assume that someone caused it.

- Smoking or nicotine exposure during pregnancy
- Alcohol or certain non-prescribed drug use
- Poor nutrition or difficulty gaining enough weight during pregnancy
- Long-term kidney, heart, lung, or autoimmune conditions
- Some infections during pregnancy
- Chromosomal or genetic conditions
- Multiple pregnancy, such as twins or triplets
- A previous pregnancy affected by SGA or growth restriction

Diagnosis

SGA is confirmed after birth. The baby is weighed, and the weight is plotted on a growth chart that accounts for gestational age. Some charts also account for sex at birth. Accurate pregnancy dating, usually supported by an early ultrasound, helps make the comparison reliable.[3]

Before birth, growth may be checked by measuring the distance from the pubic bone to the top of the uterus. This is called fundal height. If the measurement is smaller than expected, an ultrasound may be offered.

Ultrasound can estimate fetal weight by measuring areas such as the head, abdomen, and thigh bone. It can also assess amniotic fluid and growth over time. Because estimated fetal weight is not exact, an ultrasound cannot by itself confirm that a baby will be SGA at birth.

Doppler ultrasound measures blood flow in the umbilical cord and other blood vessels. It can help assess how well the placenta is supporting the fetus. Abnormal blood flow may suggest growth restriction and a need for closer monitoring.[1,2]

After birth, further tests are based on the baby's examination and medical history. These may include blood sugar checks, a blood count, or tests for infection or genetic conditions. Not every SGA baby needs extensive testing.

Treatment and management

Management during pregnancy focuses on monitoring fetal wellbeing and deciding when birth will be safest. There is no general treatment that reliably makes a small fetus grow faster or repairs a poorly functioning placenta.

Monitoring may include repeat growth ultrasounds, Doppler measurements, fetal heart-rate monitoring, and attention to fetal movement. Any maternal condition, such as high blood pressure, is managed separately. The timing and method of birth are based on growth, blood flow, gestational age, and the health of both the fetus and pregnant person.[1,2]

Being SGA does not automatically require a caesarean birth. Some babies can be born vaginally with appropriate monitoring. Earlier delivery or caesarean birth may be recommended when there are signs that continuing the pregnancy is less safe.

After birth, care may include:

Some babies need care in a neonatal unit, particularly if they are premature, very small, unable to maintain blood sugar or temperature, or having breathing or feeding problems. Stable babies may remain with a parent on the postnatal ward.

Feeding plans are tailored to the baby's needs. Breast milk is suitable for most SGA babies, although expressed milk, formula, or tube feeding may sometimes be needed. The aim is steady, appropriate growth rather than rapid weight gain at any cost.[4]

Children who remain significantly short later in childhood may be assessed by a growth specialist. In selected cases, growth hormone treatment may be considered according to local criteria.

- Keeping the baby warm, including skin-to-skin contact when appropriate
- Supporting breast or formula feeding
- Checking blood glucose when indicated
- Monitoring breathing, temperature, alertness, and feeding
- Treating any specific complication

Complications

Many SGA babies have no serious complications. Risk is higher when growth restriction is severe, the baby is premature, or placental blood flow is abnormal.

Possible problems around birth include low blood sugar, known as hypoglycaemia, and difficulty staying warm because the baby has less body fat. Some babies have feeding difficulties, low oxygen levels, or a high concentration of red blood cells.

A fetus affected by placental insufficiency may tolerate labour less well. This is why closer fetal heart-rate monitoring may be recommended. Severe growth restriction is also associated with a higher risk of stillbirth, although an individual baby's risk is influenced by several clinical findings.

Over the longer term, some children remain shorter or lighter than their peers. Severe growth restriction, especially with premature birth or other medical problems, may increase the chance of developmental or learning difficulties.

Research has also found associations between restricted fetal growth and later high blood pressure, type 2 diabetes, and heart and blood vessel disease. These are population-level associations, not predictions about an individual child. Family history, lifestyle, and later growth also influence risk.

Prevention

SGA cannot always be prevented. A naturally small body size, a genetic condition, or an unexpected placental problem may not be avoidable.

Regular prenatal care can help identify growth concerns and conditions such as high blood pressure. Avoiding smoking, nicotine, alcohol, and non-prescribed drugs reduces preventable risks. Support is available for people who find stopping difficult.

Managing long-term health conditions before and during pregnancy may lower some risks. Any prescribed medicine should be reviewed with a qualified healthcare professional rather than stopped without advice.

When a previous pregnancy involved SGA or FGR, care in a later pregnancy may include earlier assessment and additional growth monitoring. Monitoring does not prevent every case, but it can help guide the safest timing of birth.

Living with it and what to expect

SGA remains a description of size at birth even if the child later grows rapidly. It does not become an ongoing illness by itself.

Many SGA babies show catch-up growth during infancy or early childhood. Catch-up growth means moving closer to the usual growth range for age. It often happens during the first two years, but the timing differs, especially for babies who were also premature.[5]

Some children remain smaller than average throughout childhood and adulthood. A steady

growth pattern may be healthy, particularly when shorter stature runs in the family. What matters is the pattern over time, not a single measurement.

Routine follow-up usually includes weight, length or height, and head circumference measurements. Feeding, movement, communication, hearing, vision, and other developmental areas may also be reviewed. Extra assessment can be arranged if growth stalls or developmental concerns appear.

Most children born SGA attend school, take part in physical activity, and live ordinary lives. Those with complications related to prematurity, severe growth restriction, or an underlying condition may need longer-term medical, developmental, or educational support.

When to get medical help

During pregnancy, contact your maternity unit promptly if your baby is moving less than usual or there is a clear change in their normal movement pattern. Do not wait until the next routine appointment.

Urgent assessment is also needed for vaginal bleeding, leaking fluid, regular painful contractions before term, severe headache, vision changes, sudden swelling, or severe pain beneath the ribs. These symptoms do not necessarily mean the fetus is small, but they can occur with pregnancy complications that affect fetal wellbeing.

Call emergency services if a newborn or infant:

Seek same-day medical advice if the baby is feeding much less than usual, repeatedly vomiting, unusually sleepy, cold or feverish, increasingly jaundiced, or producing fewer wet diapers. Follow any discharge instructions about blood sugar, feeding, and temperature.

Slow weight gain without urgent symptoms usually needs a routine appointment rather than emergency care. Arrange a review if the child is not following their expected growth pattern, has persistent feeding problems, or is not meeting developmental milestones.

- Is struggling to breathe or has blue, grey, or very pale skin
- Has a seizure
- Is floppy, unresponsive, or very difficult to wake
- Stops breathing

Common questions

Is SGA the same as fetal growth restriction?

No. SGA describes a baby whose birth weight is below the expected range. FGR means growth before birth was limited by a medical or placental problem. A naturally small baby can be SGA without having FGR.

Does SGA mean my baby is premature?

No. Prematurity is based on when the baby is born, while SGA is based on size for gestational age. A baby may be full term and SGA, premature and SGA, or premature but appropriately sized.

Will an SGA baby catch up in growth?

Many do, particularly during the first two years, but catch-up growth is not guaranteed. Family height, prematurity, the cause of small size, feeding, and the baby's overall health can affect growth.

Did I cause my baby to be small?

Usually there is no simple cause. Placental function, inherited size, maternal health, infections, and fetal conditions may all play a role. Sometimes no explanation is found. Smoking and some substance exposures increase risk, but SGA should not automatically be treated as someone's fault.

Can an SGA baby go home at the usual time?

Often, yes. Discharge is generally based on whether the baby can feed adequately, maintain body temperature and blood sugar, breathe normally, and gain or maintain weight as expected. Babies needing extra support may stay longer or receive neonatal care.

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