A difficult birth: what is shoulder dystocia?

information for you



Royal College of Obstetricians and Gynaecologists

Setting standards to improve women's health

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What is shoulder dystocia?

Shoulder dystocia occurs unexpectedly during childbirth. It is when the baby's head has been born but one of the shoulders becomes stuck behind the mother's pelvic bone, preventing the birth of the baby's body (see diagram below).

Shoulder dystocia can occur during a normal (spontaneous) birth or an instrumental (ventouse or forceps) birth (for further information see **An assisted birth** (operative vaginal delivery: information for you). Very rarely, there can be difficulty delivering the baby's shoulders at caesarean section.

In a normal birth there is a small delay between the delivery of the head and the body but in shoulder dystocia

the delay is longer than normal. The head has been born but the baby cannot start breathing because its chest remains compressed in the mother's pelvis. At this time, the baby's body also squashes the oxygencarrying umbilical cord.

In this situation the baby's shoulders need to be quickly released so that the baby's body can be born and the baby can start breathing air into its lungs (see What happens if a baby has shoulder dystocia?).



Shoulder dystocia: the baby's shoulder becomes wedged behind the mother's pelvic bone

How common is shoulder dystocia?

Shoulder dystocia occurs in about one in 200 (0.5%) of births.

Can shoulder dystocia be anticipated?

At every birth there is a small risk of shoulder dystocia. In most instances, it is not possible to identify who it will happen to or why it occurs.

Some factors may indicate when a difficult birth might occur. These are:

- large babies (over 4.5 kg)
- diabetes in pregnancy
- previous shoulder dystocia
- induction of labour
- slow progress in labour.

Shoulder dystocia has been linked to the birth of large babies. However, most large babies (over 4.5 kg) do not have a difficult birth. In addition:

- ultrasound scanning is not an accurate predictor of birth weight towards the end of pregnancy, particularly in large babies
- at least half of all the babies who have shoulder dystocia weigh less than 4 kg.

Your obstetrician and midwife will be aware that in every birth there is a small possibility of shoulder dystocia.

Can shoulder dystocia be prevented?

In most instances, shoulder dystocia cannot be prevented because it cannot be predicted.

- If the baby is suspected to be very large during pregnancy most mothers will be advised to have a normal (spontaneous) birth. Caesarean section and early induction of labour are not routinely recommended.
- If a mother has previously had a birth complicated by shoulder dystocia, the obstetrician or midwife may discuss having a caesarean section birth.

What happens if a baby has shoulder dystocia?

When shoulder dystocia is suspected during the birth, it can be very frightening for the mother and birthing partner. It is an emergency and therefore minutes matter. Your midwife will push the emergency bell and three or four members of staff, including obstetricians, midwives and a doctor for the baby (paediatrician), will come into the delivery room and assess the situation.

The obstetrician or midwife will:

- ask the mother to stop pushing
- reposition the mother to allow the baby maximum room inside the birth canal to be born. The woman may be asked to lie on her back and her legs will be pushed towards the abdomen (known as McRoberts' manoeuvre)
- press on the mother's abdomen just above the pelvic bone to try to release the baby's shoulder
- consider making a cut (episiotomy) to enlarge the vaginal opening
- try to move the baby within the birth canal to free the shoulders so that the baby's body can be born.

These are specific manouveures to help to release the baby's shoulder and allow a safe birth. All obstetricians and midwives who attend the birth are familiar with these manoeuvres. In most maternity units the manoeuvres are practised regularly.

After the birth, the mother and baby will be carefully monitored (see **What could shoulder dystocia mean for a mother and baby?**).

What could shoulder dystocia mean for a mother and baby?

For the baby

• Nerve damage (brachial plexus injury)

The nerves in the neck (brachial plexus) provide movement and feeling to the arm. When the baby's shoulder becomes stuck in the pelvis at the time the head is born, the nerves in the baby's neck may become damaged.

Up to one in ten babies (10%) who have shoulder dystocia have brachial plexus injury. The injury may cause loss of movement (paralysis) to the baby's arm but, in most cases, this is temporary and movement will return within hours or days. A small number of babies (one in 100 who have shoulder dystocia) will experience permanent damage. The two main types of brachial plexus injury are Erb's palsy and Klumpke's paralysis (see **Useful organisation**).

• Other injuries

Shoulder dystocia can cause other injuries including fractures of the baby's arm or shoulder. In the vast majority of cases, these heal without any problems. Sadly, in some situations, even with receiving the best care, a baby can suffer brain damage, if he or she is not getting enough oxygen (birth asphyxia) and can even die.

For the mother

Vaginal tears

The vagina can tear during the birth of the baby. This tear may extend to the back passage (third-degree tear) or to the vaginal wall (vaginal laceration). A doctor or specialist midwife will carefully repair these.

• Heavy bleeding (postpartum haemorrhage)

About one in ten (10%) of women are affected by heavy bleeding after a birth complicated by shoulder dystocia. Some women may require treatment and/or a blood transfusion.

Emotional impact

After experiencing shoulder dystocia during childbirth, some mothers feel guilty about and responsible for any harm incurred to the baby. There is no published evidence to suggest that this complication occurred as a result of anything the mother did, or did not do, during labour. A difficult birth may have an effect on the whole family. Shoulder dystocia should not affect your chances of conceiving but it may take a while before you feel ready to try again. If you continue to feel upset, speak with your obstetrician, midwife, health visitor and/or GP.

Useful organisation

Erb's Palsy Group 60 Anchorway Road Coventry Warwickshire CV3 6JJ Tel: 024 7641 3293 Web: **www.erbspalsygroup.co.uk**

Sources and acknowledgements

This information is based on the Royal College of Obstetricians and Gynaecologists (RCOG) guideline Shoulder Dystocia (published by the RCOG in July 2006). This information will also be reviewed and updated, if necessary, once the guideline has been reviewed. The guideline contains a full list of the sources of evidence we have used. You can find it online at: www.rcog.org.uk/resources/Public/pdf/ shoulder_dystocia_42.pdf

Clinical guidelines are intended to improve care for patients. They are drawn up by teams of medical professionals and consumer representatives who look at the best research evidence available and make recommendations based on this evidence.

This information has been developed by the RCOG Patient Information Committee, with input from the Consumers' Forum and the authors of the clinical guideline.

It has been reviewed before publication by women attending clinics in Cambridge, Poole and London.

A final note

The Royal College of Obstetricians and Gynaecologists produces patient information for the public. This is based on guidelines which present recognised methods and techniques of clinical practice, based on published evidence. The ultimate judgement regarding a particular clinical procedure or treatment plan must be made by the doctor or other attendant in the light of the clinical data presented and the diagnostic and treatment options available.

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