

Breech presentation

1. Summary

At the end of the pregnancy, some children lie in breech presentation: with the buttocks down and the head up. Early in the pregnancy breech presentation is quite normal but at the end of the pregnancy the child typically lies with its head at the bottom. It is usually unclear as to why a child remains in breech presentation at the end of a pregnancy. There are some situations with an increased chance of breech presentation:

- if you are pregnant with twins or more;
- if the uterus or pelvis has an unusual shape;
- if the placenta or a uterine fibroid lies in front of the exit;
- if the child has congenital abnormalities.

If your child still has breech presentation 36 weeks into the pregnancy, the gynaecologist or obstetrician can try to rotate the baby. In the event of a breech presentation at the end of the pregnancy you can choose between a caesarean section or a vaginal birth. A child with breech presentation can usually be born vaginally. The buttocks or feet of the baby will appear first. In the Netherlands, gynaecologists have agreed on a number of conditions under which a standard, vaginal birth is safe, also for a breech birth.

2. What is breech presentation?

In breech presentation, the head of the child lies towards the top of the uterus. If the buttocks lie by the exit of the pelvis, it is referred to as frank breech. The legs can also lie underneath the buttocks, which is referred to as complete breech.

Complete breech



Complete breech: with the knees bent so that the feet lie next to the buttocks.

Frank breech



Frank breech: with the legs upwards along the body.

Incomplete breech



Incomplete breech: one leg in frank breech, one leg in complete breech.

3. How often does breech presentation occur?

Early in the pregnancy many children have breech presentation. Most children rotate during the pregnancy themselves. Around the expected due date less than 3% of children have breech presentation.

4. Why does a child have breech presentation?

In more than 85% of pregnancies, it is unknown as to why a child has breech presentation around the expected due date. There are some situations with an increased chance of breech presentation:

- in a multiple pregnancy;
- if the uterus or pelvis has an unusual shape;
- if the placenta or a uterine fibroid lies at the entrance to the pelvis;
- if the child has congenital abnormalities.

5. Breech presentation examination

In the event of breech presentation, your abdomen will be examined via ultrasound. The physician or ultrasound technician observes whether your child has significant congenital abnormalities. This rarely occurs but such abnormalities can be the cause of breech presentation. The physician or ultrasound technician also looks at the position of the baby's head, the amount of amniotic fluid, the

position of the placenta and potential uterine fibroids or other abnormalities that may block the entrance of the pelvis.

6. What happens if the baby is still in breech presentation at 36 weeks?

If your child is still in breech presentation at 36 weeks or later there are three further options:

- the physician tries to "rotate" your child into cephalic presentation;
- a vaginal birth in which the buttocks or feet emerge first;
- a caesarean section 39 weeks into the pregnancy.

Your physician will discuss with you which options are realistic in your situation.

7. Rotating a child in breech presentation

Why is a child in breech presentation rotated?

The risks for child and mother are the lowest during a vaginal birth with cephalic presentation.

When is a breech presentation rotated?

Many children will rotate themselves into cephalic presentation before 36 weeks into the pregnancy. Therefore, it is practical to rotate the child right after this period. Sometimes it is better to do it a bit sooner or later. This typically has to do with the amount of amniotic fluid. It is almost always possible to try to rotate the child right up until the birth

How is rotation performed?

In some hospitals, a child with breech presentation is rotated at the outpatient clinic but it is also possible that you will be admitted for it. The gynaecologist, a resident or an obstetrician who works at the hospital will try to rotate the child. You will lie on a bed or an examination table. Before one begins the rotation, the physician will monitor the heart sounds

(CTG, cardiotocogram) and the position of the child. In some hospitals you will receive an injection or tablet with a pain-suppressing medication to ensure that the uterus does not contract. This can cause your heartbeat to increase for a few hours and you may suffer from heart palpitations.

It is important that you lie as relaxed as possible so your abdominal muscles do not tighten. A pillow under your knees may feel better. When you find a comfortable position the obstetrician or physician will hold the child. One hand holds the buttocks of the child, just above the pubic bone and tries to rotate them upwards. The other hand holds the top of your abdomen and tries to push the head down. This way the child turns its head downwards. The length of the rotation varies from less than 30 seconds to more than 5 minutes. Sometimes, if the buttocks of the child have settled into the pelvis, the assistant pushes them upwards via the vagina to facilitate the rotation. Afterwards, the heartbeat of your child will be monitored again via a CTG.

How often is rotation of the child successful?

It is not predictable whether rotation of the child will be successful. In general: the earlier in the pregnancy it is and the more amniotic fluid there is, the easier it is to rotate the child. This also has a drawback: if it is easy to rotate the child then the chance that child will return to that position is also high.

In a number of situations rotation is more difficult:

- In a far advanced pregnancy the amount of amniotic fluid is lower, which makes it more difficult to rotate the child.
- If the placenta lies by the front wall of the uterus it is more difficult to grasp the child for rotation.

- The smaller and heavier you are the more difficult rotation becomes.
- During the first pregnancy, the uterus is still firm and rotation has a lower chance of success than in the second or third pregnancy.

The average chance of success is approximately 40%.

During pregnancy with twins, it is not possible to rotate either child and in the event of high blood pressure or scarring in the uterus, the gynaecologist can sometimes decide not to rotate the child.

Possible consequences and complications from rotation

There are no dangers for the mother. You may receive medication to relax the uterus. This medicine can cause side effects but these will always pass. The wall of the abdomen can be sensitive and painful for a few days because of the pushing. This is uncomfortable but does no real harm.

After the rotation the heartbeat of the baby sometimes slows a bit but it almost always returns to normal. In very rare cases (less than 1%), the heart sounds remain abnormal and a caesarean section is immediately necessary.

After the rotation

If the child is rotated successfully, you can, in principle, give birth at home (unless you have another reason for a hospital birth). The child can return to breech presentation on its own.

Your physician or obstetrician can consider another rotation, which usual occurs after a week. If the child remains in breech presentation then you must stay at the hospital for monitoring of the pregnancy and the birth.

Women with rhesus negative blood groups receive an injection of anti-D after a rotation attempt, whether the rotation of the child is successful or not.

For more information, see the pamphlets Pregnant, general information and Blood group, rhesus factor and irregular antibodies.

8. Vaginal birth with breech presentation

How does a standard birth with breech presentation progress?

In many ways, a breech birth is similar to a birth with a child in cephalic presentation. There are also three phases: dilation, expulsion and the period after the birth.

The dilation phase often progresses somewhat differently in a breech birth. The buttocks, legs and feet lie at the bottom and press on the cervix. These are smaller than the head and can get through the cervix more quickly. You may feel the need to push before complete dilation occurs because of this. The physician or obstetrician will then ask you to stop pushing.

Expulsion occurs exactly as with a child in cephalic presentation. Towards the end, if the body of the baby is approximately half of the way outside, the gynaecologist will ask you to take a deep breath and stop pushing. During the following contraction, the head can come out in one attempt. Upon exit of the head, an assistant will often press above the pubic bone to ensure that head has fully passed through the pelvis.

During a breech birth a special bed is almost always used: the foot of the delivery bed is removed and you will place your legs in supports (just as with internal examination in a gynaecologist's chair). The gynaecologist can then stand between your legs to help with the birth. With a child in frank breech, with the legs up, the buttocks exit first, then the rest of the body and the arms and finally the head. The birth of a child in complete

breech occurs the same way, but one or both of the legs exits first.

Monitoring of the heartbeat typically occurs, either externally, via the abdomen, or internally, via an electrode on the buttock of your child.

Possible complications for the mother

The chance of complications for the mother is not greater during a breech birth than during a birth with cephalic presentation. There is, however, a greater chance that the gynaecologist decides for a caesarean section.

Possible complications for the child

Directly after the birth Children in breech presentation who undergo a standard (vaginal) birth, are more often admitted to the incubator room shortly after the birth than children born via caesarean section. After a standard birth after 38 weeks of pregnancy, approximately 1 in 20 children require time in an incubator and that is ten times more frequent than after a caesarean section. There are various reasons for admission. After the birth, the child sometimes requires additional oxygen or respiratory support. Sometimes injury occurs during the birth, such as bone fracture, nerve damage or intracranial haemorrhage. This rarely occurs (in approximately 1% of all children with breech presentation), but approximately two times more frequently than after a caesarean section.

After the birth

For the long term there is no difference between children with breech presentation born via caesarean section than those born vaginally. Development proceeds the same way and there is no greater chance of mortality.

Examination of two-year-old children shows that the health of children who have been in an incubator is no different

from children who have not been in an incubator.

9. Caesarean section with breech presentation

Possible complications for the mother

The chance of serious complications for healthy pregnant women due to caesarean section is extremely small, but still always greater than after a standard birth (see also The caesarean section).

These are not life-threatening complications. Some of these also occur after a standard birth, such as anaemia or thrombosis.

Others are the result of caesarean section, such as secondary bleeding in the abdomen, bruising or infection of the wound, injury to the bladder or intestines which are not going well. A bladder infection occurs more frequently after a caesarean section than after a standard birth.

Possible complications for the child

In very rare cases, it is difficult to remove a child in breech presentation from the uterus via caesarean section and (nerve) injury can occur.

Sometimes, the caesarean section must be planned very early in the pregnancy to avoid a spontaneous labour. Then the child can develop lung problems, for which admission to the incubator room is necessary. That is why caesarean sections are generally not performed before the pregnancy has reached 38 weeks.

After the caesarean section

A caesarean section causes a scar on the uterus. This is a disadvantage for the following birth.

After a caesarean section, you will be advised to give birth at the hospital for a subsequent pregnancy because the scar increases the chance of complications during the following birth. The scar can,

for example, tear open, the placenta can sit in front of the opening, or the placenta can grow very tightly with the uterus which causes more bleeding after the birth. A rare consequence is that the uterus must be removed after a caesarean section. These complications occur very infrequently but more often after a caesarean section than a standard birth (see also The caesarean section).

10. Making a choice

When is a vaginal birth possible?

At the end of the pregnancy, the gynaecologist will discuss with you and your partner whether a standard birth is safe, or if it is better to perform a caesarean section. For a safe vaginal birth, some conditions apply:

- There must have been no serious problems during a previous birth, such as technically difficult performance of the delivery via vacuum or forceps (a previously easily performed vacuum or forceps delivery is no trouble).
- The estimated weight of the child is not too high.
- The head of the child is bent forward and not backward.
- There is some settling of the breech into the pelvis.
- The dilation and expulsion are advancing well during the labour.

Do you actually have a choice?

Your gynaecologist gives advice during a breech presentation. Many women can choose between a caesarean section and a vaginal birth themselves. One condition is that the gynaecologist who will guide the vaginal birth, believes this is safe. In that case there is little reason to choose a caesarean section. In a number of situations, you have no choice:

- It is too late to have the caesarean section done: the child is just about to be born.
- It is too early to do a caesarean section: if labour has yet to begin, the gynaecologist must wait until 38 completed weeks of pregnancy. Before this time, the risk of respiratory problems for your baby is too high.
- The gynaecologist finds it unsafe to let you give birth vaginally, for example, if the child is too large or is not positioned beneficially, because you have had a technically difficult delivery previously, because dilation or expulsion is not advancing well or because the heart sounds of the child are getting worse.

The difference between a vaginal birth and a caesarean section has only been examined for so-called 'term breeches'. These are children in breech presentation who are born after a normal pregnancy duration (between 37 to 42 weeks).

Making a choice

If you as the expectant parents can choose between a standard birth or a caesarean section, it is important to put all arguments side by side. Many parents think that a caesarean section is the safest way but a caesarean section also has drawbacks. We have placed both forms side by side (see overleaf).

11. In conclusion

A child in breech presentation usual leads to many questions. You can, of course, discuss your ideas, any doubts and concerns with your gynaecologist. This text will help prepare you for the conversation.

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