



KK Women's and
Children's Hospital
SingHealth

Information About Labour And Delivery



PATIENTS. AT THE HEART OF ALL WE DO.®

This information leaflet has been designed to provide you with information and advice that you may find useful preparing for your labour and delivery.

What do I need to prepare for my delivery?

Gather information about admission and delivery

Financial counselling and information about estimated delivery and hospitalisation bill can be obtained at the Admissions Office located at Level 1, Women's Tower or online via the Admissions Buddy Portal at www.singhealth.com.sg/AB with your SingPass.

Checklist of things to bring for your delivery and admission

- Room slippers
- Cardigan
- Mobile phone and charger
- Personal toiletries, make-up, hair accessories
- Glasses/contact lens
- Nursing bras and breast pads
- Going home outfit for you and your baby
- Car seat for your baby



Documents:

- Appointment booklet
- Admissions folder (if package/room is selected)
- Identity card/passport

What are the signs of labour and when do I need to seek medical help?

Signs of labour:

- Regular contractions occurring every 5 to 15 minutes
- Blood-stained mucus discharge from the vagina / "show"
- Sudden gush or continuous trickle of clear fluid from the vagina ("waterbag" rupture)

Medical concerns:

- Your baby is moving less than usual
- Vaginal bleeding
- Fever
- Severe headaches / changes in vision or abdominal pain

If you encounter any of the symptoms above, please proceed to:

Less than 22 weeks pregnant

Urgent O&G Centre (Basement 1, Women's Tower)

More than 22 weeks pregnant

Delivery Suite (Level 2, Women's Tower)

What can I expect when arriving at the Delivery Suite?

At the Delivery Suite, you will be assessed by our midwives who will advise if you need to be brought into a delivery room directly, or attended to by our doctors at the Triage area.

Your accompanying family member can be seated at the nearby waiting area. After being assessed by our doctors, depending on your condition, you may subsequently be admitted to a delivery room or antenatal ward, or advised to return home.

What happens during labour?

Once you are admitted to the delivery room with established labour, you and your baby will be monitored closely. You will have an infusion line set up on your arm and your baby will be monitored continuously with cardiotocography (CTG). Regular vaginal examinations will be performed by a doctor/midwife to monitor and assess your labour progression.

Pain relief in labour

Some women may find contractions very uncomfortable and would like to opt for pain relief. Pain relief options available include breathing exercises & massages by husband, entonox gas (laughing gas), pethidine injections and epidural.

Oxytocin infusion

If your labour is not progressing well, your doctor may prescribe oxytocin infusion to regulate your contractions.

Eating during labour

You are advised not to eat during labour. In case of emergency, you may need general anaesthesia. Having a full stomach increases your risk of aspiration whilst you are under general anaesthesia. Sips of water or ice cubes, however, are encouraged to keep yourself hydrated.

Accompanying person

Your husband is encouraged to accompany you in the Delivery Suite and to provide support, but exceptions may be made for your mother/sister instead. Please inform the nurse-in-charge at the point of admission to the Delivery Suite if someone other than your husband will be accompanying you during labour.



Photography/videography

Photography and videography are allowed where there is no ongoing procedure taking place, including during delivery. Hospital staff should not be captured in photography/videography without consent.

Normal vaginal delivery

A normal vaginal delivery is the safest way to deliver your child. However, some women may not be suitable to go through a normal vaginal delivery. Your doctor will discuss with you the mode of delivery that is the safest and most appropriate for you and your baby during your antenatal clinic visits.

Even in the most experienced hands and with all the precautions taken, up to 30% of women in labour require an emergency caesarean section or an assisted vaginal delivery. Other risks and complications that can happen following a normal vaginal delivery include:

- **Perineal tears:** The vagina and surrounding tissues are likely to tear during the delivery process. Sometimes, an episiotomy (a cut between the vagina and anus) will be performed to reduce the risk of serious perineal tears (deep tears into the anus and back passage). Most tears heal well after a surgical repair. However, these wounds can breakdown due to poor tissue healing and infection. In severe cases, some women may experience flatus and/or faecal incontinence.

- **Excessive bleeding:** If a delivery results in serious tears to the vagina, retained placenta tissues or the womb does not contract, you may experience excessive bleeding. You may be given medication to cause your womb to contract and stop the bleeding or brought to the operating theatre for examination, removal of retained placenta tissues and repair of the vaginal tear. In such circumstances, you may need blood transfusion and be expected to stay in the hospital for a longer period of time for monitoring.
- **Perinatal asphyxia:** This is a condition where your fetus does not get enough oxygen during pregnancy, labour, delivery or just after birth. Although it causes severe neurological disability and sometimes death in the babies, it accounts for less than 0.1% of deliveries. Some causes of perinatal asphyxia include the placenta separating from the womb too soon, very long or difficult delivery, serious infection in the mother or baby, high or low blood pressure in the mother, baby's airway is blocked or not formed properly and rupture of the womb.
- **Shoulder dystocia:** In this situation, the baby's head has come out of the vagina, but one of the shoulders becomes stuck above the mother's pubic bone during the delivery. This occurs in about one in 150 (0.7%) vaginal births and are more likely to occur in large babies, if you have had shoulder dystocia before, have diabetes, your body mass index (BMI) is 30 or more, your labour is induced, you have a long labour or you have an assisted vaginal delivery. In most instances, it is not possible to predict when it will happen. Complications for the baby include nerve injury in the neck, which may cause lack of movement in the arm but this is usually temporary (permanent damage is rare), fracture of baby's arm or shoulder (majority heals extremely well) or brain damage due to perinatal asphyxia.

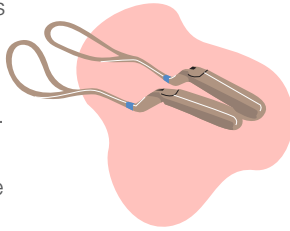
Assisted vaginal delivery by forceps or vacuum device

An assisted vaginal delivery occurs in about 10% of all deliveries. There are a number of reasons for needing an assisted vaginal delivery (with forceps or a vacuum device) during the birth of your baby. The main reasons are:

- There are concerns about your baby's well-being during delivery
- You have become too tired to deliver the baby yourself. This can happen after a long labour or prolonged pushing.
- Your baby's head is not in the best position to be delivered easily on your own. For example, your baby may be facing upwards to your abdomen, instead of facing downwards to your back, as occurs more commonly.
- You are advised not to push during delivery (e.g. you have serious heart condition)

Forceps delivery

Forceps are devices that look like a pair of large bent spoons with hollow centres. They are made to carefully fit around your baby's head. Coupled with your pushing efforts, your doctor will pull on the handles and help you deliver the baby. After the birth, there may be grazes and bruising on your baby's head and face. They are not permanent and may take several days to settle, causing no lasting effects.



Vacuum delivery

With this type of delivery, a round plastic cup will be gently attached to your baby's head by a suction pressure. By pulling on the cup, coupled with your pushing efforts, your doctor will help you achieve a successful delivery. Babies born in this way, will have an area of swelling on the head (called a chignon). This is caused by fluid trapped inside the tissue of the skin where the cup was applied. This swelling usually disappears after 24 hours of birth. Occasionally, there may be grazes on the scalp due to the vacuum cup and may take several days to settle.

Possible complications from assisted vaginal delivery

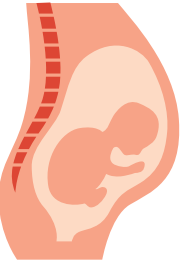
We stress that most of the assisted vaginal deliveries are uneventful and will be performed only with you and your baby's best interests in mind. However, you may encounter complications as below:

- **Failure to achieve a vaginal delivery.** Your doctor will make a thorough assessment and decide if it is advisable for a caesarean section to be performed or if an alternate instrument may be used instead.
- **Complications to the mother.** Having an assisted vaginal delivery increases your risk of having a third or fourth degree perineal tear (a tear involving the muscles of the anus or rectum), difficulty passing urine after birth and developing infection after delivery as compared to having a normal vaginal delivery.
- **Complications to the baby.** Serious complications to the baby are not common, however, skull fracture, bleeding into the baby's brain (five to 15 in 10,000 babies), small cuts or bruises on baby's head and face, and injuries to nerves or other organs may occur occasionally. Following an assisted vaginal delivery, shoulder dystocia may also occur.

Emergency caesarean section

An emergency caesarean section will be advised if a vaginal birth is considered too risky for the woman and baby during the course of labour. A caesarean section is an operation to deliver a baby by making a cut through the woman's abdomen and into the womb. Some common reasons for needing an emergency caesarean section include:

- **Very long labour.** You might have a prolonged labour because your labour did not really start (you may have contractions, but your cervix may not be dilating) or your labour failed to progress (your cervix stops dilating and this may happen if your baby's head cannot fit through your pelvis).
- **Wrong baby's position.** If you are already in labour but your baby is in a wrong position for a vaginal delivery, e.g. buttock or feet first (breech) or stretched out sideways (transverse).
- **Concerns to mother or baby's wellbeing.** Severe or uncontrolled blood pressure in the mother (pre-eclampsia), excessive vaginal bleeding (e.g. due to separation of placenta or rupture of the womb), fetal monitor showing suspicious patterns of your baby's heart rate or tangled/prolapsed umbilical cord.
- **Unsuccessful assisted vaginal delivery.**



Possible complications from an emergency caesarean section

Advances in surgical techniques and anaesthesia have made caesarean section a very safe operation. However, as with all surgical procedures, there are some risks and complications, which may occur during and after a caesarean section. Some of the risks include:

- Infection of the wound, urinary tract and womb lining
- Excessive bleeding which may require a blood transfusion, or possibly further surgery to remove the womb or to stop the bleeding in severe cases
- Damage or injury to your bladder or the tubes connecting the kidneys and bladder
- Damage or injury to the bowel or intestines
- Developing blood clots in the legs (deep vein thrombosis), which can cause pain and swelling in your calves and could be very dangerous if these clots travel to the lungs (pulmonary embolism)

Having a caesarean section puts you at a slightly higher risk of developing complications in the subsequent pregnancies. There is an increased risk of the placenta covering the incision of the womb (placenta accreta) or the tearing of the womb in labour (rupture), in future pregnancies.

What happens after the baby is born?

The nurse will place the baby on your chest to establish skin-to-skin contact. Breastfeeding is also initiated if both you and your baby's condition permits. As KK Women's and Children's Hospital is a Baby Friendly Hospital Initiative (BFHI)-accredited hospital, we advocate skin-to-skin contact and early initiation of breastfeeding within the first hour of birth, to facilitate optimal mother-child bonding.

You will also be given a hot drink and biscuits after a normal vaginal delivery or assisted vaginal delivery. However, after an emergency caesarean section, you will be monitored in the post-operative recovery area until your condition is stable and safe to be transferred to the postnatal ward.

How long will I need to stay in hospital?

- For vaginal deliveries, the average length of hospital stay is 24 to 36 hours.
- For deliveries via caesarean section, the average length of hospital stay is 48 to 72 hours.



If you have any further queries, please feel free to discuss them with your doctor.



Scan QR code to learn more about Giving Birth at KKH

Useful telephone number

Central Appointments

6294-4050



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