

Uterine inversion

Uterine inversion is a potentially life-threatening complication of childbirth. Normally, the placenta detaches from the uterus and exits the vagina around half an hour after the baby is delivered. Uterine inversion means the placenta remains attached, and its exit pulls the uterus inside-out.

In most cases, the doctor can manually detach the placenta and push the uterus back into position. Occasionally, abdominal surgery is required to reposition the uterus.

The rate of uterine inversion is estimated from one in 2,000 to one in several hundred thousand labours. Estimates vary widely - depending on the study. The mother's survival rate is about 85 per cent. The cause of death includes massive bleeding (haemorrhage) and shock.

Grades of inversion

Uterine inversion is graded by its severity. This includes:

- **Incomplete inversion** - the top of the uterus (fundus) has collapsed, but the uterus hasn't come through the cervix.
- **Complete inversion** - the uterus is inside-out and coming out through the cervix.
- **Prolapsed inversion** - the fundus of the uterus is coming out of the vagina.
- **Total inversion** - both the uterus and vagina protrude inside-out (this occurs more commonly in cases of cancer than childbirth).

Risk factors

Some of the factors associated with an increased risk of uterine inversion include:

- Prior deliveries.
- Long labour (more than 24 hours).
- Use of the muscle relaxant magnesium sulphate during labour.
- Short umbilical cord.
- Pulling too hard on the umbilical cord to hasten delivery of the placenta, particularly if the placenta is attached to the fundus.
- Placenta accreta (the placenta has invaded too deeply into the uterine wall).
- Congenital abnormalities or weaknesses of the uterus.

Diagnosis methods

Prompt diagnosis is crucial and possibly lifesaving. Some of the signs of uterine inversion could include:

- The uterus protrudes from the vagina.
- The fundus doesn't seem to be in its proper position when the doctor palpates (feels) the mother's abdomen.
- The mother experiences greater than normal blood loss.
- The mother's blood pressure drops (hypotension).
- The mother shows signs of shock (blood loss).
- Scans (such as ultrasound or MRI) may be used in some cases to confirm the diagnosis.

Treatment options

Treatment options vary, depending on the individual circumstances and the preferences of the hospital staff, but could include:

- Attempts to reinsert the uterus by hand.
- Administration of drugs to soften the uterus during reinsertion.

- Flushing the vagina with saline solution so that the water pressure 'inflates' the uterus and props it back into position (hydrostatic correction).
- Manual reinsertion of the uterus while the woman is under general anaesthetic.
- Abdominal surgery to reposition the uterus if all other attempts to reinsert it have failed.
- Antibiotics to reduce the risk of infection.
- Intravenous liquids.
- Blood transfusion.
- Intravenous administration of oxytocin to trigger contractions and stop the uterus from inverting again.
- Emergency hysterectomy (surgical removal of the uterus) in extreme cases where the risk of maternal death is high.
- Close monitoring in intensive care for a few days, if necessary.

Detachment of the placenta

Whether the placenta is detached before or after the repositioning of the uterus depends on the circumstances and the preferences of the hospital staff. For example, the placenta may be so engorged with blood that it's too big to push back through the cervix. This means that either the placenta is manually detached, or else the uterus (and attached placenta) is repositioned surgically. Some doctors believe that removing the placenta prior to repositioning the uterus increases the risk of haemorrhage. In this case, the treatment option would be surgery.

Increased risk for subsequent pregnancies

A woman who has experienced uterine inversion is at risk of it happening again in subsequent pregnancies. If you change doctors, make sure you tell them about your complication, so they can include precautionary measures in the labour ward. For example, your doctor may want to have appropriate equipment on hand, such as anaesthesia.

Where to get help

- Your doctor

Things to remember

- Uterine inversion is a potentially fatal complication of childbirth.
- Uterine inversion means the placenta fails to detach from the uterine wall, and pulls the uterus inside-out as it exits.
- Treatment options depend on the severity, but could include reinserting the uterus by hand, abdominal surgery or emergency hysterectomy.

This page has been produced in consultation with, and approved by:

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