

Caesarean Section is not Only Way to Handle Post-dated Pregnancy

Post-dated pregnancy extends beyond 42 weeks. This condition occurs in 5%-10% of pregnancies. Without proper monitoring and treatment, overdue babies may suffer from injuries or even death.

The normal duration of pregnancy is 38-40 weeks. Some pregnancies that go past the due date are actually dated incorrectly. In some women, the date of ovulation cannot be exactly pinpointed. For others, if prenatal screening is done late, the due date may not be determined precisely. An ultrasound screening performed before week 12 can get a more precise due date.

The cause of post-dated pregnancy is not yet known but structural abnormalities, such as dysfunctional pituitary gland, can cause delayed birth in some babies.

Post-dated Pregnancy is Associated with Placenta Decline

As the pregnancy passes week 40 to week 42, the placenta function declines. Amniotic fluid reduces, thus the protection of the fetus as a cushion diminishes. Since the placenta functions less well, the circulation between the placenta and the fetus reduces. As a result, the fetus may not get enough oxygen and nutrients.

With reduced protective amniotic fluid, an overdue baby may experience stress and pass stools into the amniotic fluid when s/he is still inside the uterus. Inflammation in the lungs occur if the baby breathes the stools into his/her lungs. Emergency treatment is needed to clear the contaminated fluid from the baby's lungs to allow s/he to breathe after birth.

Induction in Week 41 has been the Rule of Thumb

A review of treatment methods for post-dated pregnancy in 2003 has included the Canadian study conducted in various provinces, which was published in The New England Journal of Medicine in 1992 and has been one of the largest scale studies. Compared with waiting for natural birth, induction performed in week 41 is found to reduce the rate of caesarean section. Thereafter, induction in week 41 is performed for post-dated pregnancy as a general rule.

For women who prefer natural birth, non-stress test can be performed to monitor the baby's condition, thus help mothers and doctors to decide if intervention is necessary.

Ultrasound is used to estimate the volume of amniotic fluid. However, it can only give a rough estimate of the volume based on the depth of amniotic fluid detected.

Evaluation of Doppler's Indices to Monitor Fetal Condition is Underway

The Department of Obstetrics and Gynaecology, Faculty of Medicine, the University of Hong Kong, studies the application of Doppler's indices to evaluate the chances of post-dated pregnancy complications. Doppler's indices is the use of ultrasound to measure the blood resistance in the fetal artery.

A study conducted by the department in 2004 found that, as the blood resistance in the fetal kidney arteries decreases, the birthweight increases. That is, with decreasing blood resistance in the kidney arteries, the chances of post-dated pregnancy complications increase.

In 2003, another study by the same department found that the blood resistance in the brain arteries decreases as the amniotic fluid becomes more stained, indicating increased chances of post-dated pregnancy complications. When the functions of placenta decline, the brain arteries open up to increase blood flow and to maintain sufficient oxygen and nutrients to pass through.

Caesarean Section is not the Only Way

With a high risk of post-dated pregnancy complications, the treatments can be natural birth, induction and caesarean section. For the first child, induction takes over 10 hours in general. If the first child is delivered by natural birth, induction for the second child can be faster. However, induction should be avoided if the previous child is delivered by caesarean section because induction may cause scar rupture.

Although caesarean section is the quickest treatment for post-dated pregnancy, its long-term effect on women is yet to be known. Therefore, with the availability of non-stress test and surveillance, informed decisions should be made to deal with post-dated pregnancy. Post-dated pregnant women may have to seek doctor's advice before deciding the best method for delivery.