

Congratulations! You're expecting twins, and that means double the blessings and joy, you'd think? Carrying multiples entail certain health risks to the mother and the foetuses, and the task of raising twins or multiples can be a real challenge. **By Ivana Teo**

After almost five years of marriage, it was a big moment when Joyce Lim, 35, learnt that she was expecting twins. She had twins on her side of her family so it was not really much of a shock, but a pleasant surprise.

But the happiness was short-lived. Into her second trimester, she started bleeding and when a viability scan was done, the specialist told them that both the foetuses did not register any heartbeats. "I was aghast! I could not believe my ears or my eyes. I was crying all the way to the operation theatre." I had to undergo an evacuation (D & E) immediately. Four months later, Joyce conceived another pair of twins again. Now, she is a proud mother to a pair of twin girls, who are already six months old.

One of the most common risks of a multiple pregnancy is that of pre-term delivery. "There is probably a limited capacity of the uterus with regards to how much it can stretch, and also with regards to the ability of the placenta to provide sufficient nutrition. That is why the incidence of premature birth as well as the severity of pre-maturity increases with the number of foetuses conceived. Also, the risk of premature delivery and foetal loss is greater for identical twins as compared to fraternal twins," explains Dr Julinda Lee, Consultant Obstetrician & Gynaecologist at Pacific Specialist Practice.

Exploring **Multiple Pregnancies**

Who is more likely to conceive multiples?

According to Dr Ann Tan, Consultant Obstetrician & Gynaecologist at Women & Fetal Centre, older women who are receiving fertility treatment are at higher chance of conceiving multiples as, "A woman's ovulation gets irregular as she ages. The use of fertility medications induces the release of more than one egg per cycle in general and therefore the possibility of conceiving multiples is enhanced."

Hereditary is another factor that increases your chance of conceiving twins. Women with a family history of fraternal twins (e.g. her mother, or her mother's mother who is a fraternal twin) may carry a gene for hyper-ovulation; which means the female releases more than one egg during an ovulation cycle, increasing their ability to conceive fraternal twins. Fraternal twinning is also slightly more likely in women who conceive soon after they stop taking birth control pills.

Health Risks For Mothers

Some potential health problems that can affect the pregnant mother include:

- Increased severity in the symptoms of early pregnancy, e.g. morning sickness. Sheila Wong, mother of a pair of healthy two-year-old boys empathises with mothers facing such a situation. "Throughout my first trimester,

How are twins formed?

There are two types of twins – identical and fraternal twins. Identical twins are also called monozygotic (meaning 'one egg') twins. Their genes are identical and they are always of the same sex. In identical twinning, one egg joins with one sperm to form a zygote, which then splits into two cells. The two-cell mass travels down the fallopian tube and attaches separately or together in the womb.

Fraternal twins are also called dizygotic (meaning 'two-egg') twins. They share approximately 25 percent of their genes, just like any other siblings. In fraternal twinning, two separate fertilisations occur simultaneously between two sperms and two separate eggs. The probability of conceiving a boy-girl fraternal twin pair is 50 percent while there is a 25 percent probability each for a boy-boy twin and a girl-girl twin.

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I would wake up feeling the urgent need to puke even though I didn't eat much the night before or have not eaten anything for that day. And a lot of foods put me off; the smell of oily food, durian, even my favourite chicken curry would trigger my nausea."

- Increased risk of suffering a miscarriage and bleeding during pregnancy.
- Increased risk of developing medical conditions such as anaemia, hypertension and gestational diabetes during pregnancy. If the mother, like Angela Khoo, already has such prior medical conditions, the possibility of the condition worsening increases as well. Angela had mild anaemia prior to pregnancy, and when she was pregnant with her boys, her medical condition was aggravated, "I was experiencing blackouts and fatigue more often. Whenever I wanted to stand up after sitting down for long periods, I had to get up slowly from my position to prevent experiencing a blackout, same goes for wanting to sit up after lying down. And I tire easily and needed to rest constantly."
- Increased risk of contracting pregnancy complications such as placenta praevia and abruption placenta.
- Higher possibility of the need for operative delivery
- Greater risk of bleeding post-delivery. Since the womb is over-stretched, it often fails to contract well after delivery, leading to postpartum haemorrhage.

Mothers with multiples will also experience an increased level of pregnancy-related physical discomfort. If we compare against a singleton pregnancy, pressure symptoms such as bladder symptoms, lower limb and vulval edema, and varicose veins tend to intensify for mothers carrying twins or multiples.

Dr Tan further comments, "The usual complaints of ligamentous pains in the back, pelvis and feet tend to come on earlier in the pregnancy as well. This is due to the fact that with twins, one reaches approximately the same size as a singleton pregnancy of six to seven months by the time they are only four to five months. Weight gain is also more rapid with a multiple-pregnancy."

Health Risks For Foetuses

Due to the increased risk of pre-term delivery for the mother, her unborn infants are in danger of suffering from complications arising from a premature birth. Infants from a twin or triplet-birth are usually smaller and lighter as compared to babies from a singleton birth.

In addition, Dr Lee mentions that twins or multiples have an increased risk of developing congenital abnormalities or suffer from growth retardation. Physical deformities may also occur, given the fact that there are two babies sharing the same womb, and one twin might be sitting on the other's face or leg. Hence, defects such as bowed legs and bent ankles may occur. However, these problems usually disappear completely in time. Chances are, there would be no serious complications.

As for genetic defects such as Down's Syndrome, it happens only in fraternal twinning. This is a genetic problem, which can happen to any singleton birthing. It happens in non-identical twins because you have two separate eggs being fertilised by two different sperms. They are thus two different individuals. As it is, the chance of having a child with Down's Syndrome is in relation to the mother's age.

In the case of identical twinning, if the zygote splits early (one to three days after fertilisation), each embryo will have a separate chorion and amnion and each baby will develop separately within the mother's womb. However, if the zygote splits 14 days after fertilisation, the two foetuses may be joined together at some part of their bodies and this results in Siamese or conjoined twins. Most conjoined twins are stillborn and those that survive after delivery often die within a few hours.

Dr Tan goes on to inform that the Twin Twin Transfusion Syndrome (TTTS) is another potential health problem to the unborn babies. TTTS is a placental disorder that occurs in mothers pregnant with identical twins. Here, the blood flows unevenly, with one foetus receiving too much blood while the other receiving too little. The twin receiving more may experience heart failure due to continual strain on its heart and blood vessels; while the twin receiving less may experience life-threatening anaemia due to its inadequate supply of blood. Such an imbalance in blood flow can occur at any time during the pregnancy, including delivery.

Therefore, if at birth, one twin is significantly larger than the other, the physician should check the blood count of both

Precautionary Measures

Given the potential health risks involved, mothers of twin or multiple pregnancies should consider these safety measures:

- Mothers should go for more frequent antenatal visits so that complications can be detected earlier, with necessary measures instituted. Supplements can also be prescribed to reduce the likelihood of anaemia.
- Regular scans of the twins, probably more often with monozygotic twins because of their risk for TTTS, also allow early detection of foetal anomalies.
- Mothers should also eat nutritive meals and rest adequately so as to ensure good growth of their foetuses. "Most importantly, watch out for signs of pre-term labour as that is the main problem leading to increased foetal morbidity and mortality. These signs include increased uterine tightness or cramps or unusual pressure felt over the pelvis or lower back," Dr Tan advises.

babies. The severity of TTTS varies from case to case; depending on when the syndrome occurs, when it is diagnosed, and if any treatment is required.

Delivery

In twin or multiple pregnancies, a lack of space in the womb can make it difficult for the foetuses to move into the head-down position for delivery. Hence, one or more of the babies can be breech, resulting in the need for Caesarean births. Sometimes, the first baby may be born vaginally but the other(s) would have to go through C-section births.

Even in the case where both twins are in the correct head down position for delivery, there may be a risk of the second undelivered twin suffering from a lack of oxygen if there is a long delay between the birth of the first and the second. This is why the delivery of the second child is often assisted with oxytocics (to speed up

contractions) and forceps.

The Challenges Ahead

"Giving birth to triplets can put a huge burden on your household expenses. You need to buy three sets of just about everything the babies need. We started saving up for our boys when my gynaecologist told me I was expecting triplets," Mdm Elsie shares.

Having twins also means you need twice the amount of time and energy to attend to them. Sheila elaborates, "What I learnt is not to expect your babies to feed one after another or when you want them to. My boys fed on demand and it was really tiring because I was waking up every other hour to feed either of them or concurrently. I had very little rest during the first three months. Luckily my mother came over in the day to help me with the household chores and cooking."

Most parents like to dress the twins or multiples in similar clothes, or have them share the same lifestyle and do the same things. Such development is not advisable. Parents should treat multiples as individuals. Though multiples share the same genetic material, their subjective experience as individuals differ and these experiences shape them as individuals. Each multiple will emerge with his own identity and interests, which can be quite different from the others. You can help by enhancing their unique strengths instead of drawing attention to their similarities. 