





## Soul sisters

As they've grown, so has their connection. Big sister Olivia, who is two whole minutes older, takes the lead, while Zoe is an enthusiastic follower of her sister's escapades.

"She'll look after Zoe and she bosses Zoe around," Ann says. "And Zoe listens to everything she says."

When they pose for the photo shoot with The Weekly, it's animal names that draw two identical smiles. The crew shouts "meerkats!" and "monkey!" and the girls' adorable faces break into shy, toothy grins. Shining through is the determination and love that has got them this far.

## A shaky start

Pregnancy is supposed to be joyful, but for many it can be an anxious wait, particularly if the parents-to-be have already suffered a miscarriage. This was the situation Ann Le and Jason Poon found themselves in when Ann became pregnant for the second time in 2018. The Melbourne couple's first flush of hope had ended in a painful loss, and the second time around their optimism was tempered with caution.

Their first scan at six weeks showed a tiny baby with a strong heartbeat. The technician said everything looked fine, but Ann and Jason were afraid to get their hopes up. That night they had dinner at Jason's parents' house. Nobody knew about the first miscarriage or this pregnancy. Before the meal, Ann had a shower and to her horror began to haemorrhage.

"I had to pretend everything was okay because nobody knew. I just thought, it's happened again," she recalls. As soon as they got into their car she burst into tears, thinking, "Not again. This cannot be happening again."

The next day, she and Jason hurried to the doctor for an emergency ultrasound. The news was a shock.

"They said, 'You've haven't had a miscarriage, you've actually got twins. You've also got a bleed.' It was a lot of information. Twins, and a bleed," Ann says. She had a subchorionic haematoma. It was about three centimetres in size and it sat between the uterine wall and the amniotic sac.

It's a common abnormality but it puts the pregnancy at a greater risk of miscarriage. The twins were small but mighty, with strong heartbeats. Nevertheless, Ann and Jason remained on tenterhooks and began regular ultrasounds to monitor them.

Ann was at work one day when she suffered another huge bleed. "There was blood everywhere," she says. "I looked like I'd been shot." She drove home in distress, certain that they'd lost the twins this time. They went for yet another scan. The babies were okay, but the haematoma had grown to over 7cm. Ann and Jason were knotted up with anxiety. The bigger the haematoma, the greater the risk.

"There's no medication you can go on," Ann explains. "There's just nothing. It was fingers crossed the whole time." That evening, during a blood test to screen for chromosomal abnormalities, the clinician couldn't find the membrane that would normally separate the twins. That was when Ann and Jason first learned their babies might be momo twins.

The doctor gently explained the implications. In most pregnancies with twins, the babies have individual sacs and placentas. A momo pregnancy (where twins share one sac and placenta) he said, occurs in just 1 per cent of identical twins and is very high risk.

Hearing the precarious state of her babies, Ann says, felt like having her heart ripped out of her chest. But there was nothing she and Jason could do but watch and wait. Happily, the haematoma disappeared, but the pregnancy remained very high-risk.

It's standard procedure for mothers of momo twins to be admitted to hospital at 26 weeks to be monitored until the twins are delivered at 32 weeks. Ann did just that, and dedicated herself to safeguarding her twins for as long as she could.

Jason says he felt helpless. "I was trying to be as attentive and as present as possible in the small things you can do." Each day, the babies' chance of survival increased. But two weeks after Ann was admitted, the scans began returning concerning



Clockwise from above: After 27 days in IC, Zoe reached for Olivia when they were reunited; Olivia is the more adventurous of the two. but Zoe soon follows her big sister's lead.

results. "You could see the dropping of the heart rates and your heart would be in your mouth," she says.

The doctor said the umbilical cord was knotted and the babies needed to come out. Ann and Jason were devastated. They'd known their girls would be premmie, but not this premmie. The babies would be born just shy of 29 weeks. "I badly wanted the girls to get to the 32-week mark," Ann says. "We were excited to meet them but also devastated they couldn't stay in longer."

She was wheeled into the operating theatre where there was a "cast of thousands" - a medical team for each of the babies, and a team for Ann. Fortunately, they were all calm. This helped her rein in her fear for her babies. At 2.10pm the first miraculous baby arrived.







"She let out a cry, she was beautiful," Ann remembers, smiling. "I cried and was so happy to hear her. I just thought, 'The first one's out and crying'." But when Zoe was born, there was no reassuring wail. "I thought, why isn't she crying? Maybe she's not breathing ... "

Zoe was whisked away. After a tense wait, the doctors reported both babies were fine. Ann and Jason had never been happier. They were able to briefly cradle their delicate, precious

girls. Then they were rushed off to Neonatal Intensive Care (NICU).

"They were so, so small. The size of my forearm," Ann remembers.

"There was just not much on them," Jason adds. "But I could still hold them. I went out and cut the cord. You still had those moments that you ordinarily would have."

The doctors showed Ann and Iason the umbilical cord, which had

a giant, sinister knot in it. Their girls had made a lucky escape. But they weren't out of the woods yet.

Shining hope
Things were touch and go in the

coming days and weeks. Zoe and Olivia often had trouble breathing. Fortunately, they were in the right place. The Royal Women's Hospital was conducting a study called the SHINE trial, led by Dr Kate Hodgson, who had come up with a way to provide a safer experience for the most vulnerable babies.

Premmie babies sometimes need breathing tubes, which can be fraught. Ventilators can damage tiny lungs.

"It's a life-saving procedure but one that can be pretty high risk," Dr Hodgson tells The Weekly. "Our population is particularly vulnerable and fragile because of their size. Our tiniest babies here are sometimes less than 500 grams. We avoid putting [breathing tubes] in as much as possible ... In addition to their size and the fact that babies have less reserve, it means things can be pretty challenging."

But Olivia and Zoe needed oxygen. "There were a lot of periods where the girls were really unstable," Ann says. The medical staff would have to be quick, accurate and careful.

The team at the Women's Hospital hoped Dr Hodgson's new technique would act as a sort of breathing safety net for premmie babies. Olivia and Zoe were put on a high-flow system, which delivered gently heated air and oxygen into their airways through two small prongs in their noses. The belief was that this would keep them stable, and the staff calm, as they performed the delicate work of inserting a breathing tube. Happily, it worked.

The little ones had to be intubated on two separate occasions. Both times the extra air ensured there were no complications, and the procedure helped stabilise them for the next stage of their journey.

More broadly, the trial was also a success. Two hundred babies were put on 'high flow' over the course of the study and the proportion who had a breathing tube placed correctly on the first attempt without their oxygen levels dropping went from 32 per cent to 50 per cent. It sounds like a small intervention but it's world-leading research that will go on to save many premature babies' lives. The research has since been published in *The New* England Journal of Medicine and presented at the Pediatric Academic Societies Meeting in Denver so other babies the world over can benefit from







After a dramatic start to life. Zoe and Olivia are just like other happy and healthy four-yearolds, with no ongoing problems, much to the gratitude and relief of their parents.

## A verv

Olivia and Zoe are about to celebrate their fourth Christmas, and they are thriving. Remarkably, they have no ongoing health problems. They are delightful, healthy little girls who fill their parents' lives with joy. "Their favourite thing to do is wear their princess

dresses," Jason says. "One has Belle from Beauty and the Beast, the other has Elsa from Frozen. All they want to do is put music on and go twirling."

"But they're surprisingly different," Ann says. "Chalk and cheese," Jason agrees. "In terms of their patience, their ability to concentrate, even how active they are - the one who loves to climb versus the one who's a bit more timid."

"Which is bizarre because geneticswise they're the same," says Ann. From being each other's lifeline, Zoe and Olivia have grown into allies. Co-conspirators. Best friends.

"They love each other so much," Ann says. "It's very much a big sister-little sister dynamic, even though they're twins. Olivia tests the boundaries a bit more, but she'll lure in Zoe." As they explore the country home in regional Victoria that's the location for our photoshoot, Olivia and Zoe hold hands, their bond strong and true. In their short time on earth they've already overcome so much. As they look forward to their next adventure, one thing's certain: whatever life throws at them, they'll always have each other. AWW

the procedure that helped keep Zoe and Olivia on track.

After 27 days in the NICU, the twins finally met again. As soon as they were close enough, Zoe reached for her sister. "The first thing that happened was Olivia was on my chest and they bought Zoe over and Zoe's arm immediately reached for her sister and gave her a cuddle. It was amazing," Ann says.

The girls depended on each other. Olivia, in particular, had unstable oxygen levels. "But every time she was put in a cot with Zoe, she was actually stable," Ann explains. "They calm each other. No matter how much oxygen they gave Olivia, having Zoe next to her was the thing that actually calmed her."

Yet the roller-coaster still wasn't over. The main issue the girls had been battling since birth was a heart defect, patent ductus arteriosus, which is common in premature babies. This meant an extra duct in their pulmonary artery was making their little hearts work harder and causing fluid to build up in their lungs.

"They would turn blue whilst we

were holding them, and the nurse would have to tap their backs to get them to start breathing," Ann says.

Soul sisters

Zoe and Olivia would need surgery.

"This is what we'd been dreading, both needing heart surgery when they were so little," Ann says. "One of the risks of surgery was that they could bleed to death. All through the surgery that's all I could think of. But it was either you do it, and we might be able to help them, or we don't do it and you're probably not going to bring them home." She rushes through the end of that unthinkable sentence.

Zoe was the first to be taken into the operating theatre. "It [took] 20 minutes longer than expected. So that wasn't such a bad a gap," Ann says.

"But when Olivia went into surgery the following day," Jason adds, "the procedure took an hour and a half longer than expected. We were freaking out. We were sitting there going, what's happening?"

"But all was well," Ann says, still emotional, years later. For the first time in a long time, Ann and Jason were able to breathe a deep sigh of relief.