



## Episode 6: Preeclampsia

with Emma Wells, Vice President of Australian Action on Preeclampsia (AAPEC)

### Preeclampsia

**Tiffany:** Hi, everyone. This week's episode is particularly close to my heart as I welcome our guest today, Emma Wells, my beautiful sister-in-law and one of the strongest people I know. Mother to Max, Ruby, Ava, and Evie, she is also a kindergarten teacher, holistic counselor, preeclampsia survivor, and the Co-Vice President of the Australian Action on Preeclampsia.

In this week's episode, we'll be discussing preeclampsia. We'll chat about what it is, what causes it and how it can be treated. The Australian Action on Preeclampsia, also known as AAPEC, is an Australian association incorporated in Victoria. It's a voluntary organisation set up to provide support and information to families who have suffered from preeclampsia. They endeavour to educate, raise awareness, and support people that have been affected by preeclampsia. Thanks so much for coming on today, Emma, I'm so thrilled that we have the chance to shed some light on such an important topic today for all our listeners.

**Emma:** Thank you very much, Tiff. I'm honoured to be here today.

Tiffany: So, Em, it's always lovely hearing a bit about people and how they come to be in the role they play in life now and the journey they've, I guess, taken to get there. Before we jump right in to discuss all things preeclampsia, would you mind telling everyone a bit more about your journey and becoming the Co-Vice President of the Australian Action on Preeclampsia? Because I think it means a lot. It shows a lot of passion and it shows, I guess, a little bit more about why people have got to where they are in life. And I think you've got such an amazing story to tell. So, if you could tell us all a bit about that today, that'd be great.

**Emma:** Most definitely. Yeah. Thanks, Tiff. In 2011, I was pregnant with my first child. I was young and healthy and overjoyed that I was becoming a mother. I was really privileged to be working as a kindergarten teacher and supporting and nurturing the development of young children. I was really excited as my maternity leave was fast approaching and the arrival of my first born child was coming really, really soon.

I took a day off work to have some rest and that's when I noticed I hadn't felt my baby move on this particular day. At first, I didn't realise this was unusual and being my first pregnancy I didn't know what to expect.

**Emma:** (cont...) My husband and I tried singing to our baby and tried all the tricks to bring on a movement. I didn't want to overreact or burden anyone, so I didn't go to the hospital. I've since learned that this is quite common with first time mothers.

A few days later, I was at work, my coworker insisted that I went to the hospital for a checkup. Not knowing that my world was about to change, I went to hospital with my husband, thinking that we would just be in and out. In emergency, a midwife checked for our baby's heartbeat. We were admitted upstairs and an ultrasound was performed. Team of doctors came in and helped out with the ultrasound machine, as they informed me it wasn't working correctly.

As they performed the ultrasound, sadly we were informed our son had passed away. We were in shock and disbelief, trying to comprehend what was going on. Our world was turned upside down. After some time we were induced into labor. 16 hours later, our son Max was born. As I delivered Max I lost my vision in one eye and I couldn't breathe. My liver and kidneys were shutting down.

A team of experts came in and it was discovered that I had an extreme form of preeclampsia called the HELLP Syndrome. We had just lost our son and we were now faced with almost losing my life too. I spent a week in ICU and was extremely fortunate to make a full recovery. Australian Action on Preeclampsia was a great support to me and my family in the early days and early years of our grief. I knew that one day I wanted to be able to give back to the association and also work towards helping spreading awareness of this very serious pregnancy disorder and ultimately working towards saving the lives of other mothers and their babies.

**Tiffany:** Thanks so much for sharing a bit about your journey, Emma. It's always so emotional listening to what you've endured and the loss of Max as well. But also, every time I hear your story and I read about it or I see you on the news, as you were on the news, talking about the loss of Max, it reminds me just how strong you are and how proud I am of what you've achieved and continue to do to help out families all around Australia. And of course, just raise more awareness about such an important topic. So, thanks again for all of your strength, Emma, and what you bring to supporting the Preeclampsia Association.



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**Emma:** Oh, thanks, Tiff. Going through such a devastating and life changing experience was extremely hard. But as I came through the grey haze, I knew that I wanted to honour my son and honour his existence and focus on the gifts that he brought me. I naturally love helping others and I knew that one day I'd like to be able to help other families affected by preeclampsia.

When you go through a loss like mine and my family's, our family, the loss is like belonging to a secret club that no one wants to join. But once you join this club, you share an extremely deep and unique bond with the other members, because you have this shared understanding of the experience or the pain that you've experienced. I deeply recognise the power of peer support in one's healing journey. And I acknowledge the importance of finding a sense of belonging at a time when you can feel so alone. And that's why I share my story. That's why I'm happy to talk about it. And also, yeah, working through AAPEC to be able to connect with others.

**Tiffany:** Yeah. It's so powerful and the passion that you show and the dedication, and obviously, like you said, join that club and having other people who are around you, who have gone through similar experiences or the same experience, really helps to drive that action and awareness on preeclampsia. So, I totally agree, it's incredible. So, I guess, to kick off this episode, really like to start with the obvious question which is, what is preeclampsia, Em? For everyone listening today.

**Emma:** Preeclampsia is an illness which only occurs in pregnancy. It results in high blood pressure, leakage of protein in the urine, thinning of the blood, liver dysfunction, as well as slowing the growth of the baby. It's the most common serious medical disorder of human pregnancy. If it's left untreated, preeclampsia can lead the mother to liver or kidney failure, like me, seizures, stroke, and death. For the baby, preeclampsia can affect the placenta and decrease the fetal supply of oxygen and food, leading to slower growth in the womb, a low birth weight, premature birth, and in some cases, death.

**Tiffany:** I think it's great to have a bit more of an understanding. This is such a common illness, as you've said, and horrible to hear all the things that can happen, but as we'll soon discuss, so treatable as well. So, I think, again, it'll be nice to know how this can occur and when it occurs during pregnancy?

**Emma:** And as I had said, it is a common disorder in pregnancy, but quite often, women are only finding out about it once they've gone through it. And so, this is, through the power of sharing my story today, but talking about preeclampsia, helping to spread and raise awareness, it's really, yeah, the goal of what we're trying to do, so we can help to educate women beforehand and to be able to look out for the warning signs. And for women to be able to go and have a simple checkup, and not ignore the signs like I did, or not feel as in a burden or not wanting to worry anyone.

**Tiffany:** Yeah, absolutely.

**Emma:** Yeah. So, when can it occur? So, warning signs surface in the latter half of pregnancy, usually from around 20 weeks.

**Tiffany:** Okay. So then, what are some of the common symptoms? Because like you said, it's really important to identify these early on, so that you can detect them and get this right support and help.

**Emma:** Yeah. Most definitely. Some of the common symptoms are high blood pressure and protein in the urine. So, when you go to your routine appointments with your healthcare professionals, they always take your blood pressure and protein in the urine. And this is one of the reasons they're doing that, is screening for preeclampsia.

Along with the high blood pressure and protein in the urine, excessive swelling, which is edema of their hands, feet, and face. This is common in pregnancy to have slight swelling, but excessive swelling is an indication. Severe headaches, visual disturbances, such as flashing lights or blurred vision, vomiting, and pain in the upper abdomen, difficulty breathing, and liver and kidney dysfunction.

**Tiffany:** So, there's clearly quite a few different symptoms, Em. So, I guess not everyone might have all of them, but even if you just have a few, it's definitely something, I guess, to keep an eye on there?

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**Emma:** Most definitely. And you know your body best, you're the expert on your own body. So, if ever you're in doubt or you're not feeling quite right, it's really easy just to go in and have a check, to your local emergency ward where you are attending. Just go in and say, "Look, I'm experiencing this. I want to check." And just persist on that. Most of the time it's really great to find out that everything's okay and everything's fine, but it always is worthwhile to listen to your body and your instincts.

**Tiffany:** Yeah, absolutely. I think gut instinct pays off for sure. So important to trust your instincts, isn't it? Particularly when you're pregnant and when you've got your own kids, it's so important.

So, Em, what causes preeclampsia really? What are the main things when you're talking about preeclampsia that really do, I guess, lead to that? Because I think a lot of people would then be concerned, "Okay, well what can cause it? Is there anything I can do to help prevent it?"

**Emma:** Well, the precise cause of preeclampsia is unknown. However, it is believed that genetic factors are probably involved, given that women whose mothers or sisters have suffered from preeclampsia are at an increased risk of the disease themselves. There is good evidence that the placenta is centrally involved in the development of preeclampsia.

The placenta is a specialised organ that forms in the uterus during pregnancy. It receives blood from the mother and transfers oxygen and nutrients from the mother across to the baby's circulation, thereby helping the baby to grow and develop. It does seem that in preeclampsia the placenta does not receive sufficient maternal blood for its requirements, which apparently results in a malfunction within the placental tissue. This malfunction produces factors that pass from the placenta back into the mother's circulation.

**Tiffany:** Okay. So, Em, yeah, that's really great to know that there's obviously some hereditary things to look out for and family history. So, what are the potential complications if you do get preeclampsia, Em?

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**Emma:** As I just mentioned, the factors that pass from the placenta back into the mother's circulation, they actually damage the mother's blood vessels, the result of which is increasing blood pressure. As well, kidney function is disturbed and blood proteins leak from the mother's circulation through the kidney, into the urine. As preeclampsia worsens, other organs are affected, including the mother's liver, lungs, brain, heart, and blood clotting system.

Dangerous complications, such as eclampsia, which is convulsions, stroke, fluid in the lungs from heart failure, kidney failure, liver damage, and thinning of the blood can occur in serious cases. Sadly, maternal death can even take place. These complications and maternal death are fortunately rare.

For the baby, preeclampsia can affect the placenta and decrease the fetal supply of oxygen and food, leading to slower growth in the womb, low birth weight, premature birth, and in some cases, even death, as I experienced with my baby.

**Tiffany:** Yeah. Well, there sounds like there's a lot of different complications there, but as you said, most of them are fortunately quite rare. So, if these signs and symptoms are picked up early, it's amazing what we can achieve today with the types of treatments, which we'll talk about a bit later in today's episode. So, what are some of the key risk factors for preeclampsia? Because I think that's really important, again, to know what they are so we can spot those first up.

**Emma:** Some of the key risk factors are having your first baby. Our first pregnancy, we don't know how our body reacts. So, that's the first thing we consider. But women that have a history of preeclampsia in previous pregnancies are obviously at risk.

Women that have a family history of preeclampsia or high blood pressure. If you are under the age of 20 or over the age of 40. If you are having twins or multiples. If you have high blood pressure before pregnancy. If you have kidney disease before pregnancy, or diabetes. And also, women who have a body mass index, BMI, over 30.

**Tiffany:** It's good to know what some of those are though, because obviously if you are in one of those categories or if you fit into that, particularly having your first baby, because a lot of people who listen to our episodes are about to have their first baby.

**Tiffaney:** (cont...) It's something that they can definitely be aware of and be mindful of. So, thanks so much for sharing that, Em. So, how is it diagnosed? Because I think, again, really important to know how we can work out if we have this.

**Emma:** Women should always report worrying signs or symptoms to their doctor during pregnancy. Often they may turn out to be no cause for alarm, it's a simple matter of having a blood pressure measurement, a urine check, a blood test or other investigations or examinations to be sure that preeclampsia or some other pregnancy complication is not the cause for the symptoms or signs.

The development of preeclampsia can be best detected by routine screening tests carried out at antenatal checkups. The combination of rising blood pressure and protein in the urine suggests that preeclampsia may be developing. Although, there are some other medical disorders that can give a similar picture.

It's really vital to attend all of your antenatal appointments and always seek medical help if you feel or sense that something's not right. If a previously healthy pregnant woman develops high blood pressure and protein in the urine in the latter half of pregnancy, then the diagnosis is almost always preeclampsia. Some swelling, as mentioned previously, which is edema, is common in normal pregnancy, but excessive swelling, which also involves the face, can occur in preeclampsia.

In severe preeclampsia, symptoms can appear, including severe headaches, visual disturbances and the flashing lights, blurred vision, vomiting, and pain in the upper abdomen as well. While such symptoms may have other less dangerous causes, they should never be ignored during pregnancy. Medical experts in Melbourne and Sydney have developed some exciting new research. It's working towards prediction and prevention rather than diagnosis. I was really fortunate in my third and fourth pregnancy to benefit from these exciting new tests.

So, there are recent advances that they've had in early pregnancy screening technology, using ultrasound and blood tests. And also, the discovery of circulating placental factors later in pregnancy, they're associated with preeclampsia. Both of these two things have offered a major pregnancy care recalibration that's in favour of preeclampsia prediction and thus prevention rather than diagnosis.

**Tiffany:** Yeah, that's incredible, Em. And to know that you've gone on to have your three beautiful daughters, Ruby, Ava, and Evie, is so incredible to think that they've come that far with the research and the incredible work that they've done to, like you said, prevent this rather than have that horrible diagnosis.

**Emma:** Oh, look, most definitely. People often say to me, "Oh gosh, how did you get through any other pregnancies after going through such an experience?" I was really fortunate to be in expert hands at the Women's Hospital, Professor Shaun Brennecke. And in my second pregnancy, I was prescribed a low dose of aspirin.

For me, I was extremely lucky that preeclampsia didn't surface again in that second pregnancy. And as I mentioned, in my third and fourth pregnancy, having these extra tests available and being able to benefit from them was extra reassurance and something that just money can't buy.

**Tiffany:** Absolutely.

**Emma:** Yeah. So, I'll tell you a little bit about the tests. So, the two new preeclampsia prediction tests that have been developed, they're not yet widely available in Australia. They are available at some hospitals. Australian Action on Preeclampsia at the moment is supporting initiatives to have these tests reimbursed through Medicare, which will make them more easily available to all pregnant women in Australia. So, it's really exciting and we hope that this progresses, so every pregnant woman can have access to them.

**Tiffany:** Absolutely.

**Emma:** Yeah. So, the first test that's been developed is an early pregnancy prediction test. So, the early pregnancy prediction test is an early screening test using ultrasound and blood tests at 11 to 14 weeks of pregnancy. Then the second test that's available is the preeclampsia ratio test, also known as the PERT test. This takes place in the latter half of pregnancy. So, as well as quickly diagnosing the condition by measuring proteins in the blood, it predicts whether or not the women are going to develop preeclampsia in the subsequent four weeks.



**Emma:** (cont...) Obstetricians at the Royal Women's Hospital in Melbourne say that these tests have helped hundreds of women and babies to have safe and successful pregnancies. And I am proof of this myself. Yeah, it's a real game changer and yeah, something that we're really striving hard to ensure that all women can have access to this groundbreaking research. It's incredible.

**Tiffany:** Absolutely. And well done to you for really standing up and taking action to make this happen as well, and bringing awareness to this through your work with the Preeclampsia Association or AAPEC. I mean, it's just incredible to think that you've now had three other daughters, healthy daughters, you've been healthy through your pregnancies. And to see that happen in such a short period of time really, in the big scheme of things, is incredible. But to have it now funded by Medicare would be incredible, so good luck with that. I really hope that that can be pushed through.

**Emma:** Yeah. Me too. Thank you.

**Tiffany:** So, before we finish up, how is it treated? For all our listeners out there, Em. Because like you said, there are these incredible tests now, but what are some of the other things that are going to happen? So, if you were diagnosed with preeclampsia, what would be some of the steps there that would happen?

**Emma:** Yeah, it is really important to know. You and your baby will be closely monitored by your healthcare professional. If symptoms worsened, you'll be admitted to hospital for bed rest and further monitoring and medical intervention, if it's required. If severe preeclampsia sets in, early delivery is required to save mother and baby. It's really important to mention that the only cure for preeclampsia is delivery of the baby and the placenta.

If you were considered to be at high risk of developing preeclampsia, you'll be prescribed a low-dose aspirin starting in early pregnancy, usually around eight to 16 weeks, to significantly reduce the risk of the disease. Particularly, early onset and pre-term preeclampsia.

In subsequent pregnancies, you'll be closely monitored. Some women are prescribed a low-dose of aspirin, most.



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**Emma:** (cont...) And in some Australian maternity hospitals, women are benefiting from the tests I've earlier mentioned, which is the early pregnancy prediction test and the PERT test in the latter half of pregnancy. If AAPEC is successful in supporting initiatives to have the early pregnancy prediction test and the PERT test reimbursed from Medicare, it will be extremely beneficial in determining who needs early intervention in the form of low-dose aspirin and the close monitoring throughout their pregnancy.

Furthermore, it will tremendously improve quality of life for families and work towards saving the lives of mothers and babies around Australia. It's really important to mention that following my experience of preeclampsia, I was closely monitored in my subsequent pregnancies and prescribed low-dose aspirin. I had the added benefit, as I talked about before, in my third and fourth pregnancy, of the early pregnancy prediction test and the PERT test. And it gave me the reassurance and peace of mind that I really needed to be able to sail through my pregnancies. I was extremely fortunate that preeclampsia did not surface again for me, and I had three healthy pregnancies resulting in three healthy daughters that I have today.

**Tiffaney:** So incredible, Em. And yeah, being at the birth of Ava, and being that support person for you along with my brother, Duncan, and being there at the birth and knowing what you'd been through and seeing that strength and knowing that you had that peace of mind, that you knew that your daughter would be healthy when she was born, was just so emotional and so empowering and so incredible to watch.

And I remember being at that birth so vividly and thinking all those things and being so incredibly amazed by your strength. And just knowing that she was going to be healthy and she was healthy, she was beautiful. They're all beautiful. And it's just so incredible to hear your stories. So, thanks so much for sharing your incredible journey with preeclampsia, your passion and commitment, to educate, raise awareness and support people that have been affected by preeclampsia. It really is truly so inspirational. You're a beacon of light and hope for so many families out there, Em, and I'm so proud of you.



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**Emma:** Oh, thanks so much, Tiff. I really appreciate the opportunity to share my experience with your listeners today, and you, of course, talking about it together and raising awareness of this serious pregnancy disorder known as preeclampsia.

**Tiffaney:** Well, thanks again. So, I hope you've enjoyed listening today, everyone. For more information about preeclampsia, you can head to [www.aapec.org.au](http://www.aapec.org.au), or you can check them out in their socials at [Australian Action on Preeclampsia](#).