Vaccination

RISK OF GETTING A BLOOD CLOT

The spectre of major health problems has people wary of the jab but figures show how small the risk is, writes National Health Editor Sue Dunlevy

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It's the bogeyman that is making Australians think twice about getting their COVID-19 jab — TTS blood clots. To date, 24 Australians out of the 2.1 million who have received the AstraZeneca jab have had a confirmed or suspected case and one, a 48-year-old woman, has died. Here we talk you through the condition, how to spot it, how it's treated — and how small the risk to you actually is.

WHAT IS TTS?

TTS is short for thrombosis with thrombocytopenia syndrome, an extremely rare blood-clotting condition that has been linked to AstraZeneca's COVID-19 vaccine.

It happens when small blood cells called platelets, which help the blood clot, fall below normal levels — a condition called thrombocytopenia. Although this condition usually reduces the blood's ability to clot, it can sometimes cause clots to occur when they shouldn't. Professor John Skerritt, the head of Australia's medicines watchdog the Therapeutic Goods

Administration, said it was thought the condition was brought on by a wayward immune response to AstraZeneca's COVID-19 vaccine.

The most dangerous of these clots appears in the brain when the platelets stick together and cause a blockage that prevents blood draining out of the brain, causing damage similar to a stroke. The clots can also form in the gut, the legs and other parts of the body.

"People who have had other blood clots have no increased risk; it's not associated with whether you have had clots before or whether you're on anticoagulants or platelet medicines or whether you've had a cardiac stent or a stroke," Professor Skerritt said.

WHAT ARE THE SYMPTOMS?

Symptoms include headache, tiny red spots under the skin, blurred vision, fainting or loss of consciousness, loss of movement in parts of the body, or coma, stomach ache, a cold feeling or swelling in the leg.

These typically appear from four to 20 days after the vaccination.

It's worth noting that COVID-19 itself causes thrombocytopenia in about four in 10 people, and up to 95 per cent of those with severe disease.

HOW RARE IS TTS?

TTS is very rare. Only one in every 100,000 people who get the AstraZeneca jab will develop the condition. That is the same as saying that if every single seat at the MCG were to be filled with people who'd had the vaccine, only one person would develop a blood clot.

Every day, 50 Australians develop blood clots that are not related to vaccination and there is an almost one-in-12 risk of developing a blood clot at some stage in life.

You are much less likely to get TTS from the jab than you are to get a blood clot from the contraceptive pill, where the risk is one in every 1000 people.

However, the risk of dying from TTS (25 per cent) is higher than from a clot caused by the pill (3 per cent).

Many everyday medicines are killers but we barely give a thought to using them. The common painkiller Paracetamol, for example, killed more than 200 people between 2007 and 2017.

And One of the most commonly used prescription medicines in Australia, atorvastatin, has been linked to 13 deaths.

The chance of being killed on the roads is five times higher than getting a blood clot from AstraZeneca's vaccine.

WHY THEN HAVE EXPERTS SUGGESTED IT IS SAFER FOR PEOPLE AGED UNDER 50 TO HAVE THE PFIZER VACCINE?

The risk of TTS syndrome reduces with age. For people under the age of 50 the risk of the rare blood clots is two in 100,000, if you are aged 50-70 it is one in 100,000 and, if you're over 70, it drops to 0.5 per 100,000.

On the other hand, the risk of dying or getting severely ill from COVID increases with age. "For example, if you're aged 70, you are three to six times more likely to be hospitalised with COVID than if you are 30; you are up to 10 times more likely to go to an intensive care unit; and you are many times more likely to die of COVID, compared to a 30-year-old," said the co-chair of the federal government's vaccine advisory body, Associate Professor Chris Blythe.

This is the reason experts picked 50 as the threshold age at which the risk of blood clots was outweighed by the risk of death or severe disease.

"A statistic that's quite sobering is the fact that 99.5 per cent of all deaths in Australia from COVID have been in the over-50s, even though the main cohort who have got COVID are those aged 20 to 29," Professor Skerritt said.

SHOULD YOU BE WORRIED ABOUT BLOOD CLOTS?

The reason we're having COVID-19 vaccines is to save lives, so a vaccine side-effect that actually takes lives is a risk that has to be taken seriously.

That's why the Therapeutic Goods Administration (TGA) has said the Pfizer vaccine, which does not have a blood clot risk, is the preferred vaccine for people aged under 50.

"We want people to know that if this does occur, they should present and get treatment, and by alerting people that means we may be detecting milder cases," Associate Professor Blythe said.

WHAT ARE THE TESTS FOR TTS?

If you think you may have a TTS blood clot, doctors order a blood test for a specific protein produced by the body to break down clots that is called D-dimer.

They will also test for anti-PF4 antibodies that activate platelets, and check the condition is not linked to your use of the bloodthinning drug heparin, given to most Australians if they are undergoing surgery.

WHAT ARE THE TREATMENTS?

Patients will be given intravenous immunoglobulin, which helps boost the immune system and reduce the effects of inflammation.

They may also be given a synthetic anticoagulant that prevents further clotting.

"The main thing you want to do is prevent further clotting and to get that clot out of the way where it might go to the brain or the lungs or whatever," Professor Skerritt said.

People will be hospitalised for a few days for observation while the clots dissolve.

"We don't know if there are longterm effects because this condition was really only described last month.

"It was just around Easter when the first cases of this were reported — so we don't know what it looks like in six or eight months," Professor Skerritt said.

"But we're seeing that people's platelets and circulation are restoring towards normal.

"We don't have any evidence that the people who have recovered shouldn't live a full and healthy life," he said.

PEOPLE WHO HAVE HAD OTHER BLOOD CLOTS HAVE NO INCREASED RISK TGA PROFESSOR JOHN SKERRITT