

- ADVERTISEMENT FEATURE - SANOFI

Dancing a lifesaving DVT quick step

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FOR deep vein thrombosis (DVT), and many other physiological conditions, there's a healthy marriage of theology and medicine – and it's summed up in a much-quoted verse: 'God grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference.'

Take the relatively uncommon example of someone suffering a DVT episode during a long-haul flight – and how his or her fellow passengers and the cabin crew might respond.

Two of South Africa's top haematologists warn against automatically administering an anti-coagulant, unless under the direction of a doctor who has examined the passenger and made a quick diagnosis. By all means, fetch the emergency oxygen tank and mask and administer oxygen, they say.

However, say Dr Piet Wessels, a clinical haematologist at the Groenkloof Life Hospital in Pretoria, and Professor Barry Jacobson, Head of Clinical Haematology at Charlotte Maxeke Hospital in Johannesburg; don't assume anything.

'They might have an internal bleed, so an anti-coagulant could be a real problem, especially if they've had previous DVT and are already on blood thinners. Complaining of a tight chest or a painful leg could be due to bleeding or a clot – you won't know. So, making a diagnosis is more important than uniformed management,' warns Wessels.

Jacobson says you can't change your age or family's medical history, (genetics), but you can control your weight, quit smoking and exercise regularly.

'Stasis (being immobile for long periods) for whatever reason, any damage to the lining of the blood vessels and hyper-coagulability (blood clotting or changes in the consistency of the blood), are the three main causes of DVT,' he explains.

Those at greatest risk of DVT are women taking oral contraceptives, women on hormone replacement therapy, people who've recently undergone major

surgery or suffered physical trauma, or patients with HIV. A family with a history of blood clotting is another risk factor.

The duo's advice to anyone about to fly who knows they're at risk of DVT is to take blood thinning agents under the direction of a physician who knows their history, context and condition. Jacobson scoffs at the common wisdoms of wearing loose clothing or compression stockings to avoid in-flight DVT.

'It's more to do with the altitude in people older than 40 and with predisposing conditions. None of those things really work. You need to take an anti-coagulant tablet or have an injection beforehand,' he advises.

DVT occurs when a blood clot (thrombus), forms in one or more of the deep veins in the body, usually the legs, causing leg pain and swelling – or being entirely asymptomatic. The lower down in the leg, the less risk of a clot breaking off and lodging in the lung (pulmonary embolism), which can lead to cardiac arrest. Jacobson puts the risk of a pulmonary embolism resulting from a lower leg blood clot at about 25 percent, after which it can move to the upper leg with greatly elevated risk.

Wessels says of DVT in general, 'It's either something in the patient (their own inherited make-up) or something that happens to them, such as injury, bedrest, surgery, or medication that makes them clot more easily. A family history doubles the risk for thrombosis. Other long-term risk factors are having had cancer and/ or having undergone chemotherapy. Short term high risk can be previous major surgery (two hours or more) or trauma. However, with newer, less traumatic surgery, such as keyhole, the chance of DVT occurrence has reduced post-operatively,' says Wessels.

Jacobson says DVT occurs more in Caucasian populations than others and puts some numbers to predisposing risk factors.

'If you've had, say hip surgery, you have a ten to twenty percent chance of developing DVT. The risk of flying varies between one in ten thousand and one in

100 000, but it varies between each population and age group,' the active pilot says.

While there have been rare cases of DVT in children, the risk usually increases with age, from about 40 upward, with people of Dutch descent the most prone, the duo says.

Wessels said with children venous thrombosis is far rarer, with the predisposing factors usually congenital thrombophilia (inherited risk of clotting), dehydration, and/ or endothelial damage from in-dwelling catheters.

'They're far more mobile than most adults and the 'lining' of their veins (called endothelial cells), are still perfect,' he adds.

The pair say one of the best prevention and mitigation tools is taking a proper family history from the patient and monitoring family members for DVT symptoms.

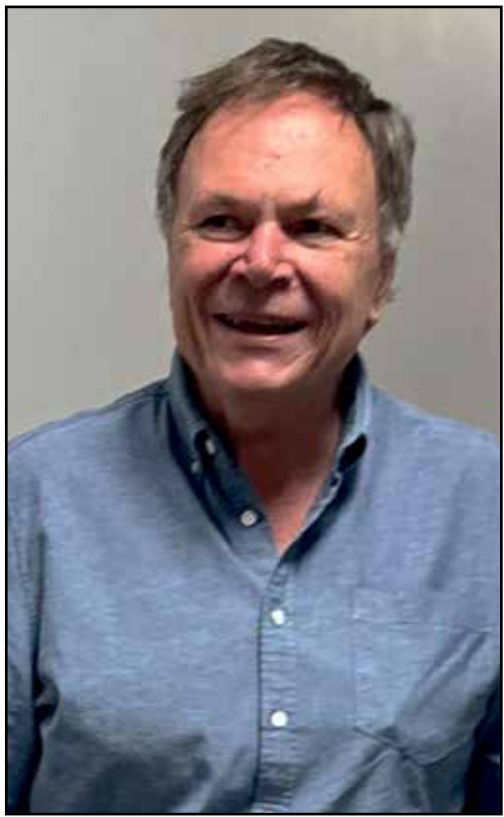
Treatment has evolved from using Warfarin to direct oral anti-coagulants or injection, which have a wider therapeutic range – after examining for indications and contra-indications – with the added advantage of no longer having to measure bloods monthly as is required with Warfarin.

Wessels said the highest risk and most 'hair raising' of all abnormalities is something called anti-phospholipid syndrome, a condition in which the immune system mistakenly creates antibodies that activate clotting in the body. These antibodies can cause blood clots to form in arteries and veins.

'It's an acquired, not inherited, disorder requiring permanent treatment with anti-coagulants which needs careful monitoring.

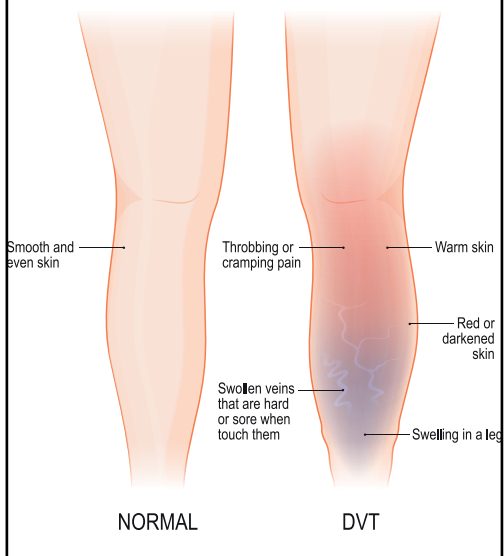
'It's rare, but you need serious vigilance, especially if they get pregnant. There's a high risk of pulmonary emboli and losing the baby and/ or the mother,' he adds.

Hopefully this story contributes to the discernment pleaded for in that famous theological verse attributed to Reinhold Niebuhr (1892 – 1971), a Lutheran theologian.



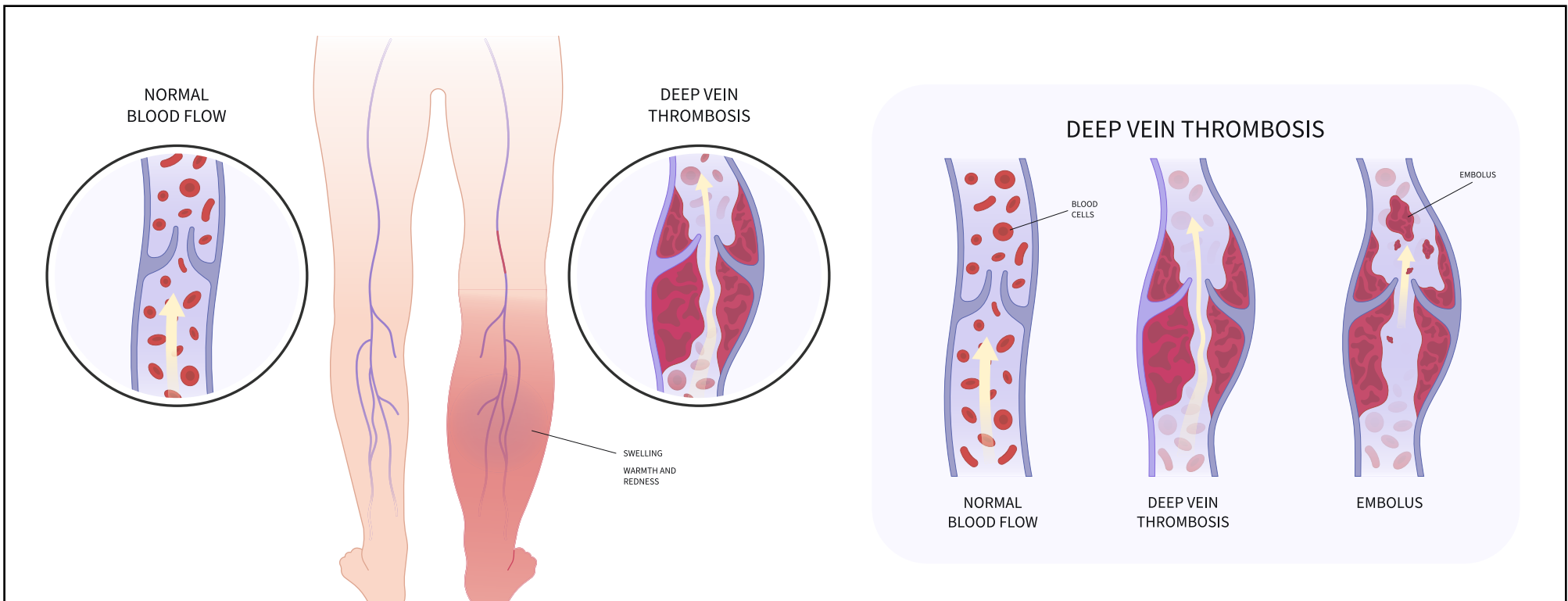
Dr Piet Wessels, a clinical haematologist at the Groenkloof Life Hospital in Pretoria. Photo SUPPLIED

Deep vein thrombosis (signs and symptoms)



Deep vein thrombosis (DVT) is a blood clot in a vein, usually the leg. Illustrated is a healthy leg (left) and a leg with DVT signs and symptoms.

Graphic SHUTTERSTOCK



Deep vein thrombosis (DVT) occurs when a blood clot (thrombus), forms in one or more of the deep veins in the body, usually the legs, causing leg pain and swelling.

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