

## Thrombosis and mental health

The ongoing COVID-19 pandemic has highlighted the importance of mental health alongside physical health. Physicians who specialise in the treatment of venous thromboembolism might not consider mental health sequela as within their primary remit; however, there is an increasing body of evidence showing that for patients with venous thromboembolism, substantial psychological distress can accompany their condition. Given that venous thromboembolism is a chronic condition that affects nearly 10 million people every year worldwide, the potential mental health burden is high. Estimating the true global effect of venous thromboembolism can be difficult, because this disorder is not counted as a cause of death and disability by the Global Burden of Disease studies; however, estimates indicate substantial global burden, including in low-income and middle-income countries (LMICs). Although the aim for physicians who treat venous thromboembolism is for patients to fully recover, having a blood clot can be a life-altering event. Individuals can develop complications, such as post-thrombotic syndrome, chronic thromboembolic pulmonary hypertension, and bleeding from anticoagulation. Even for individuals who have had venous thromboembolism with an identified cause, which has resolved with treatment and anticoagulation has been discontinued, the risk of developing another clot in the future remains higher than that for the general population, and therefore carries additional mental burden for the individual. For people with provoked venous thromboembolism, another layer of complexity is added to their care, such as for pregnant women, transgender people, or those undergoing cancer treatment.

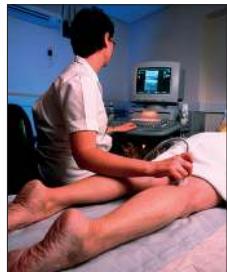
Qualitative studies into psychological distress and venous thromboembolism have identified long-term consequences of the disease. Nine patients who have had pulmonary embolism reported the event as a life-changing experience comprising initial shock, followed by feeling of loss of self, life-changing decisions, and behaviour modification. In another study, 11 patients with first venous thromboembolism within 6 months of the interview reported continued trauma and anxiety symptoms, triggered by physical and psychological reminders of venous thromboembolism. Participants also maintained negative emotions and health anxiety regarding their primary care providers, particularly for

patients who have had repeated misdiagnoses. Although venous thromboembolism is more common in older individuals, a qualitative study on 50 patients aged 45 years and younger showed that younger patients with thrombosis had lower self-esteem, and higher impairment in social activities and familial relationships, compared with healthy people. A mixed-methods study involving 72 patients with pulmonary embolism found that two met the criteria for a tentative diagnosis of post-traumatic stress disorder with many patients recalling their diagnosis as a traumatic experience. The importance of the treating physician in mitigating psychological distress is emphasised in a qualitative study of 24 individuals focusing on health-care providers' communication, which concluded that health-care providers can cause harm by unnecessarily escalating fears and concerns, but that there are opportunities to improve communication between health-care providers and patients at the time of blood clot diagnosis.

Although these qualitative studies are small in scale, a clear theme emerges; when patients with venous thromboembolism are interviewed about their experiences, they often focus on psychological distress, worry, and wellbeing, with concern about their physical recovery being less of a priority.

Although it is concerning that the mental health of patients with venous thromboembolism goes largely unaddressed, there are initiatives aiming to change that. Online support groups, such as the National Blood Clot Alliance, provide a forum in which individuals can discuss concerns and share experiences. Thrombosis UK is running a study evaluating the effectiveness of the various leaflets that help people cope with any emotional difficulties they might experience following a thrombosis.

Ultimately, more research is needed to understand the extent of mental health issues that individuals with venous thromboembolism face worldwide, particularly in LMICs, where little data are available. Additional education for treating physicians, particularly surrounding communicating a diagnosis, can help to mitigate the long-term psychological distress that can accompany a diagnosis of venous thromboembolism. Along with providing better support and information to patients, the thrombosis community should aim to not only resolve the clot, but to also ease the mind. ■ *The Lancet Haematology*



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For global estimates of venous thromboembolism see *J Thromb Haemost* 2014; 12: 1580-90

For more on coagulation and transgender care see *Editorial Lancet Haematol* 2021; 8: e241 and *In Focus Lancet Haematol* 2020; 7: e367

For the qualitative studies see *BMJ Open* 2014; 4: e004561, *BMJ Open* 2019; 9: e024805, *Intern Emerg Med* 2006; 1: 119-26, *Res Pract Thromb Haemost* 2021; 5: 301-07, and *Res Pract Thromb Haemost* 2022; 6: e12647

For the online support group see <https://www.inspire.com/groups/national-blood-clot-alliance/>

For Thrombosis UK resources see <https://thrombosisuk.org/psychological-impact-vte.php>