How common is deep vein thrombosis in patients attending the diabetic foot clinic?

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The differential diagnosis of a unilateral, red, hot, swollen foot in a patient with diabetes is wide and includes deep vein thrombosis (DVT). Patients with diabetes are thought to be more likely to develop thromboembolic disease than those without diabetes,[1,2] with studies into the mechanism showing abnormalities at various stages of the clotting process, favouring a thrombophilic state.[3]

Patients in the diabetic foot clinic, who are already in a pro-inflammatory state, are often immobilised in a cast for Charcot neuro-osteoarthopathy and to help reduce pressure on ulcers to improve healing. They are also advised to rest the foot and to avoid weight-bearing as much as possible. This combination of factors would, in theory, place our patients at an even higher risk of DVT, and a common question in clinic is whether we should be routinely anticoagulating these patients.

To try and quantify this risk, we undertook a retrospective analysis of patients seen at our multidisciplinary diabetic foot clinic, serving a general population of around one million, for the incidence of DVT in patients clinically suspected to have DVT. Between 1 January 2016 and 1 January 2018, 39 patients had an ultrasound compression venography to assess for DVT and, of these, only four patients had a DVT with a further two having thrombophlebitis. The four patients who did have a DVT had additional risk factors such as previous DVT with recent cessation of anticoagulation or recent hospital admission. None of them was in a cast.

In our cohort it appears that, despite being at a high theoretical baseline risk, the incidence of DVT is low, similar to a previous report.[4] Thus, we do not routinely prescribe pharmacological DVT prophylaxis for patients who are immobilised in casts unless there are other more significant risk factors present, which is a rare occurrence. The biggest limitation of our observation is that DVT is often silent[5] and therefore, to observe the true incidence, all patients attending the diabetic foot clinic would have to undergo leg ultrasonography and results compared with normal controls, which is obviously a large undertaking. This may, however, also help us in understanding if diabetes is indeed a true risk factor for DVT.[6]

Despite our findings, it is important not to be complacent and, if DVT is suspected clinically, it is important to exclude it due to the significant morbidity and mortality associated with thromboembolic disease.

Conflict of interest SG has nothing to declare. M-FK is editor-in-chief of BJD.

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