DEEP VEIN THROMBOSIS

Addressing the Patient with Suspected DVT

Introduction

Many patients with acute deep venous thrombosis (DVT) can be safely and effectively treated without the need for emergency department visit. Included on this website is a toolkit of information that outpatient offices (especially primary care offices) will find useful if they want to develop an outpatient DVT diagnosis and treatment pathway. These tools can be used and customized to fit an individual practice and form the basis for an outpatient DVT treatment pathway or guideline.

Treatment Option Details

Most patients can be treated with a single drug therapy approach, thus avoiding unnecessary complexity and expense of two drugs. This can be done either using apixaban or rivaroxaban, as noted below. If using rivaroxaban, we advise writing for the “starter pack” as this simplifies the prescription and reduces the need for two medication co-pays in the first month.

Other patients can be treated initially with low molecular weight heparin (LMWH) and then transitioned either to warfarin or one of two direct oral anticoagulants (dabigatran or edoxaban).

It is important to check the renal function of all patients prior to initiating therapy. LMWH and all of the direct oral anticoagulants must be dose-adjusted or avoided in patients with chronic kidney disease.

All direct oral anticoagulants have prescription assistance programs which may help to reduce the costs of these medications, if needed.

Flow Chart

When patients present with signs and symptoms of deep vein thrombosis (DVT), it is important to evaluate for signs that require emergent evaluation: signs of limb ischemia, or any signs concerning for a pulmonary embolism (e.g., tachycardia, tachypnea, shortness of breath or hypoxia).

Next, risk stratification using the Wells Score will help to determine the best next diagnostic step. For low or moderate probability patients, using a D-dimer test can help to rule out a DVT with a high degree of certainty. If, however, a D-dimer test is not readily available or the patient has a high probability of DVT, then ordering a diagnostic ultrasound to look for DVT (aka DVT scan) is appropriate. This is also the best time to check baseline laboratory studies, including renal function, blood counts, liver function, and baseline PT/PTT.
Addressing the Patient with Suspected DVT (cont.)

It is important to provide your patients with brief education about DVT and consider implications of treatment at this time. For instance, if you are concerned about the cost of medical therapy, you could have your staff request a “test prescription” be run at the patient’s pharmacy to see what out of pocket cost the patient might have to pay. A test prescription is one that a pharmacist runs to identify the cost of a medication, but does not officially authorize a medication to be dispensed to the patient. You can also ensure that you have access to prescription assistance cards, which typically offer at least 1 month of free or significantly reduced cost for anticoagulant medications.

If the DVT scan is negative, then clinical follow up is important. If, however, the DVT scan is positive, then initiating treatment acutely is important. Options include two drug strategies that start with low molecular weight heparin (LMWH) or fondaparinux and then transition either to warfarin or to a newer direct oral anticoagulant (e.g., dabigatran or edoxaban). However, many patients prefer a one-drug approach, with either rivaroxaban or apixaban. This one drug approach is much simpler for patients, and avoids the need for injection therapy. Patients with mechanical valves or severe renal dysfunction should receive warfarin therapy (direct oral anticoagulant use is not advised). Similarly, patients with active cancer should be treated with LMWH without transition to another agent.

Providing your patient with additional information about their acute DVT and the treatment you have initiated is important. Make sure to stress that they must contact you immediately if they are unable to fill their prescription at the pharmacy so that you can assist them with an alternative medication or medication assistance.

It is important to continue to follow acute DVT patients to ensure that they are able to obtain their anticoagulant and that they do not have complications or recurrent DVT. This is also a good time to determine the appropriate length of treatment, which should continue for a minimum of 3 months, but may require indefinite therapy for unprovoked (aka idiopathic) DVT.