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Portal vein thrombosis – a primer for the general physician

Editor – I was surprised to find the authors of 'Portal vein thrombosis – a primer for the general physician' strongly advocated an extensive search for thrombophilic conditions. While these conditions undoubtedly increase the risk of portal vein thrombosis, the question is does knowledge of these mutations alter the subsequent management of the condition or the duration of treatment?

There may be a justification in testing for some thrombophilic conditions, eg identifying myeloproliferative disorders with the *JAK2* mutation, and some thrombophilias convey a higher risk of recurrence than others, but there is certainly little justification in screening for factor V Leiden and prothrombin gene mutations.

The 2012 National Institute for Health and Care Excellence guidelines for venous thromboembolism (VTE), which are surprising supportive of thrombophilia screening, do not include factor V Leiden and the prothrombin mutation as they do not increase the risk of recurrence to a clinically significant extent.³

In contrast, the 2010 British Society of Haematology guidelines state 'testing for heritable thrombophilia after a first episode of intra-abdominal vein thrombosis has uncertain predictive value for recurrence. Grade C evidence – as no studies have investigated how the finding of a heritable thrombophilia should influence management'.

Analysis of the large multiple environmental and genetic assessment study showed that testing for inherited thrombophilia did not reduce recurrence of venous thrombosis.⁵

The American College of Chest Physicians guidelines on VTE, which recommend ongoing anticoagulation after an unprovoked VTE, list thrombophilias among factors that predict risk of recurrence, 'but not strongly enough to influence recommendations on duration of therapy'. And US guidelines have an equally clear message of 'do not perform thrombophilia testing in patients following an episode of unprovoked VTE'.

In summary, thrombophilia is commonly evaluated in patients without a clear indication for testing and not only that, but frequently during times when the results may be unreliable.

Conflicts of interest

The author has no conflicts of interest to declare.

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An unusual case of orthopnea

Editor – I read with interest the case of diaphragmatic paralysis presented by Keelan *at al.*¹ As they stated in their article, an iatrogenic cause should be considered; however, one they failed to mention, which is important for the physician to be aware of, is following pulmonary vein isolation for the treatment of atrial fibrillation.

The number of pulmonary vein isolations being performed is steadily increasing. At present, two main strategies exist: point by point ablation with radiofrequency energy or freezing using an expandable balloon catheter (cryoballoon). Although both are associated with phrenic nerve palsy, cryoballoon ablation has the higher complication rate reported over a number of studies (4.6–11.2% versus 0–0.3%). The majority of complications result in a temporary paralysis with an average recovery time of 4 months; however, permanent paralysis has been recognised. A right-sided unilateral palsy is the commonest reported because of the proximity of the right phrenic nerve to the right-sided pulmonary veins (especially the right superior vein). Intra-procedural phrenic nerve stimulation to monitor for complications during cryoballoon ablation has cut the rates of injury significantly⁵ and is routinely used at our centre.

Iatrogenic phrenic nerve palsy following pulmonary vein isolation can be easily overlooked as a potential cause both by the patient and clinician, particularly when the presentation is weeks after the procedure and our medical admissions units are frequented by breathless patients with exacerbations of chronic lung disease (personal experience). A higher index of suspicion should be employed, with earlier use of appropriate investigations.

Conflicts of interest

The author has no conflicts of interest to declare.

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