be trained and supported to do this? What is the effectiveness and safety of near-home management of severe malaria in the real-life setting? What is the cost–benefit ratio? Will patients or their parents and guardians feel that hospitalisation can be deferred after a patient has received a suppository? And what about the treatable bacterial infections that also claim millions of lives each year? There are no obvious answers, and studies which show how best to use this important intervention most efficiently are urgently needed.

The next important step is to develop widescale deployment strategies, through research, and to assess the effectiveness of artesunate suppositories under various real-life settings.

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Prophylaxis of catheter-related thrombosis in cancer patients

Long-term central venous catheters have greatly improved the management of patients with cancer. However, their use has been associated with upper-limb deep-vein thrombosis (DVT), especially in those patients who need chemotherapy.1 The true incidence of upper-limb DVT in patients with central venous lines is difficult to estimate, because published data are conflicting. When thromboprophylaxis was not used, Bern and colleagues2 found an incidence of 37%, as shown by phlebography. Monreal and co-workers3 reported an even higher incidence. Conversely, in recent case series and randomised studies that used ultrasonography or other non-invasive methods to detect upper-limb DVT, the rate of thrombotic disorder was lower.4,5 Along with the decreased sensitivity of objective non-invasive methods compared with phlebography, the introduction of new texture and coating of catheters (as well as new procedures to reduce invasiveness) probably accounts for these discrepancies.

Whether the positioning of an indwelling central venous catheter in patients with cancer needs thromboprophylaxis is debated. Previous studies showed that the use of prophylactic doses of low-molecular-weight heparin or fixed low-dose vitamin K antagonists could greatly reduce the rate of this complication.6,7 Accordingly, at the end of the 1990s, nearly all international guidelines recommended the adoption of either prophylactic strategy for prevention of catheter-induced DVT in patients with cancer. However, the most recent prospective clinical trials, which randomly assigned a wide series of patients with cancer to receive active thromboprophylaxis (low-molecular-weight heparin or low-dose vitamin K antagonists) or placebo after the insertion of a central venous catheter, failed to show appreciable benefits from the use of pharmacological prophylaxis.4,5,7 These findings have been confirmed by meta-analyses.8,9 Accordingly, the most recent international guidelines no longer recommend systematic prophylaxis in patients with cancer who have a central venous line.10

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The printed journal includes an image merely for illustration
Comment

The study by Annie Young and colleagues11 in The Lancet today adds to the growing body of evidence suggesting that there is no systematic indication for vitamin K antagonists—at least for regimens that produce an international normalised ratio (INR) of lower than 2.0—for the prevention of catheter-related, upper-limb DVT. In their randomised study in a large series of consecutive patients with cancer who were receiving chemotherapy, neither a fixed-dose regimen of warfarin (1 mg a day) nor a dose targeted at achieving an INR of 1.5–2.0 was effective in preventing catheter-related thromboses. Whether more conventional doses of vitamin K antagonists (ie, doses that produce an INR of 2.0–3.0) might be more effective is unknown, but they are unlikely to be associated with a more favourable benefit-to-risk ratio.

On the basis of available evidence, neither low-molecular-weight heparin nor fixed low-dose vitamin K antagonists should be used to prevent catheter-related upper-limb DVT in patients with cancer on a routine basis. However, DVT still persists despite occurring at a lower rate than in the past; thus, an effort should be made to identify patients at highest risk (and who would therefore potentially benefit from thromboprophylaxis).

For example, in a recent subanalysis12 of their randomised trial,1 Verso and co-workers identified several conditions independently associated with an increased risk of catheter-related upper-limb DVT—ie, the misplacement of the catheter tip in the upper half of the superior vena cava, the left-sided insertion of the catheter, chest radiotherapy, and the presence of distant metastases.

As the use of emerging antithrombotic (factor Xa or thrombin inhibitors) drugs becomes widespread, we expect to see improvements in the prophylaxis of catheter-related upper-limb DVT in patients with cancer, especially in those who need chemotherapy through central venous lines. Meanwhile, the decision to use available drugs for a specific period is left to the discretion of the attending physicians, who should assess the personal and familial history of the patient, the carriage of thrombophilia, the presence of comorbidities, and the patient’s preference.

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I declare that I have no conflict of interest.


Immobilisation for acute severe ankle sprain

In The Lancet today, Sarah Lamb and colleagues1 present a randomised trial in which they aimed to evaluate the effects of four different types of immobilisation devices (Tubigrip compression bandage, Bledsoe boot, Aircast brace, and below-knee cast) on the outcomes of patients recovering from severe ankle sprains. The investigators conclude that a below-knee cast for 10 days resulted in more rapid resolution of symptoms and pain and greatest recovery of self-reported ankle function at 3 months’ follow-up compared with the other three treatments. This finding is likely to be viewed as controversial because consensus recommendations in

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