

LECTURE 5

Implementing the findings from the CMO

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In April 2007, the CMO published the VTE Expert Working Group Report (Figure 9)^{1,2} and NICE provided guidance on reducing VTE risk in surgical patients (Figure 10).³ Both reports were triggered by a House of Commons Health Committee report into VTE in hospitalised patients in December 2004. Themes highlighted by the Health Committee included increasing awareness of the risk of VTE, the need for national guidelines, deficiencies in both medical and nursing education about VTE prevention and implementation of strategies to prevent thrombosis. The government responded with a communication from the CMO about existing guidance, and by instituting the VTE Expert Working Group. In addition, NICE guidance on VTE prevention in medical patients was scheduled, and is expected in 2009. The CMO also wrote to relevant bodies involved in medical and nursing education about changes to the curricula.

VTE Expert Working Group

The Independent VTE Expert Working Group consisted of about 25 members from various interest groups: medical specialties (including orthopaedics, surgery, and haematology), physicians, management, health economists, nurses and patient advocates. Their remit was to rapidly assess available guidance, consider the use of mechanical devices and clarify the role of aspirin, consider VTE awareness and education, suggest better monitoring systems to improve data on VTE outcome and mortality and make recommendations regarding implementation of thrombosis prevention. The resulting report

is available online from the Department of Health website and is included in the attached CD-ROM.^{1,2}

The advice can be divided into two sections: systems, processes and knowledge base, and thromboprophylaxis strategy. The central plank of the recommendations is the necessity in all hospitalised patients for mandatory, documented risk assessment, which should be firmly embedded in clinical governance. There was also a recommendation for improved communication of information to the public and better frameworks for professional VTE education. To achieve these goals, demonstration sites or centres of excellence are planned as a resource and to drive change. Core standards from the Department of Health will also be necessary to ensure compliance with risk assessment, which will become an essential performance measure. Finally, the impact of these changes on patients will be evaluated, to develop a better understanding of how they affect outcome.

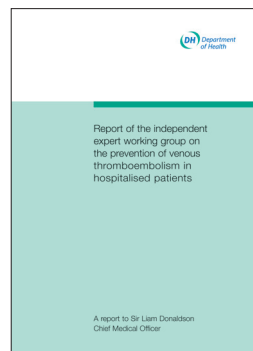


Figure 9. VTE Expert Working Group Report.

The second section provides more practical suggestions and guidance relating to thromboprophylaxis strategies for medical and surgical patients. All medical patients should be considered for thromboprophylaxis as part of a mandatory risk assessment procedure and the preferred regimen, for reasons of efficacy, safety and convenience, is LMWH. Aspirin is not appropriate in this setting and mechanical measures are not recommended because of the lack of current evidence. All high-risk surgical patients should be managed according to the NICE guidance, which is intended to complement the CMO report to improve patient safety. Intermediate-risk patients, not thought to be covered by the NICE guidance, require mandatory risk assessment followed, as indicated, by the use of graduated compression stockings and LMWH; again, aspirin is contraindicated in these patients.

NICE clinical guideline 46

The NICE guidance presents key priorities for implementation.³ The NICE process looks through a slightly different prism of experience to the Independent VTE Expert Working Group, and the resulting guidance has created some controversy. However, it has helped raise awareness about the risk related to VTE. As in the CMO report, there is an emphasis on the centrality of risk assessment, with a recommendation that all patients should be provided with verbal and written information. However, the primary intervention recommended is mechanical measures (graduated compression stockings) accompanied by appropriate training in its use. Patients at increased risk of VTE, including the particularly high-risk group undergoing orthopaedic surgery, should be offered LMWH, or fondaparinux within its

licensed indications. Extended prophylaxis (four weeks) is recommended after hip fracture surgery and for patients undergoing total hip replacement who have additional risk factors.

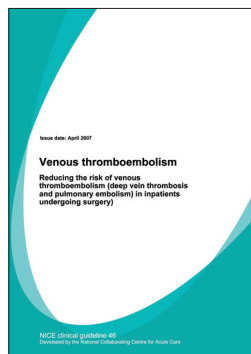


Figure 10. NICE guidelines on reducing VTE risk in surgical patients.

Both the CMO recommendations and NICE guidance must be implemented in the light of healthcare professionals' wisdom and interpretation, and the CMO has set up a small implementation working group to provide national leadership. An important part of this will be the development of a national risk assessment tool and the institution of centres of excellence/demonstration sites. However, the real action will need to happen at a local level, with local leaders and local champions for VTE prevention. Thrombosis committees and thrombosis teams, similar to those that are part of the Better Blood Transfusion Initiative, will agree local guidelines on VTE prevention and help to implement 100% risk assessment.

VERITY – A national VTE registry

VERIFY, the UK national VTE registry, may also play an important role, enabling the sharing of best practice, audit and education.⁴ VERIFY currently includes about 60,000 patients of whom about one-fifth have proven VTE.

Thromboprophylaxis and VTE risk factors are a particular focus, with an emphasis on education and sharing good practice in a multidisciplinary forum. The data show that most cases of VTE present after hospital discharge, highlighting the risk in medical and surgical patients, with greater VTE prevalence among medical patients. In addition, considerable variation in thromboprophylaxis remains. Over the last two-three years, the uptake of thromboprophylaxis has improved from about 23% to nearer 40% in hospitalised patients. Although LMWH is the preferred agent, there is considerable variation between trusts in the choice of thromboprophylaxis agents. For example, aspirin use is still prevalent in some sectors, quite inappropriately, particularly by orthopaedic surgeons.

Thrombosis committees

The Health Committee recommended that interested parties work together to ensure clinical governance and provide audit and education, in thrombosis committees. Such a multidisciplinary group was established at King's College Hospital in 1999, and has been a valuable instrument for enabling change in the trust. An early achievement was the creation of a thrombosis team to implement policies for both thromboprophylaxis and VTE treatment. In the King's College Hospital model, patients with DVT or PE are diagnosed, treated and followed by the same team.

Risk assessment

A robust and simple protocol to identify the patient at risk allows delivery of appropriate prophylaxis. Risk assessment is therefore fundamental to successful VTE prevention,

and is likely to be the single performance measure inspected by the Healthcare Commission. All patients will need to be assessed for VTE risk within 24–48 hours of hospital admission. There is a move away from an individualised approach to risk assessment containing all the exposing risks and diseases – because it is complex to use on an everyday basis – towards an opt-out protocol using patient safety indicators (Figure 11).⁵ There is currently no validated risk assessment model described in the literature, but the implementation working group are tasked with providing a simpler ideal model. In the meantime, existing models should be used.

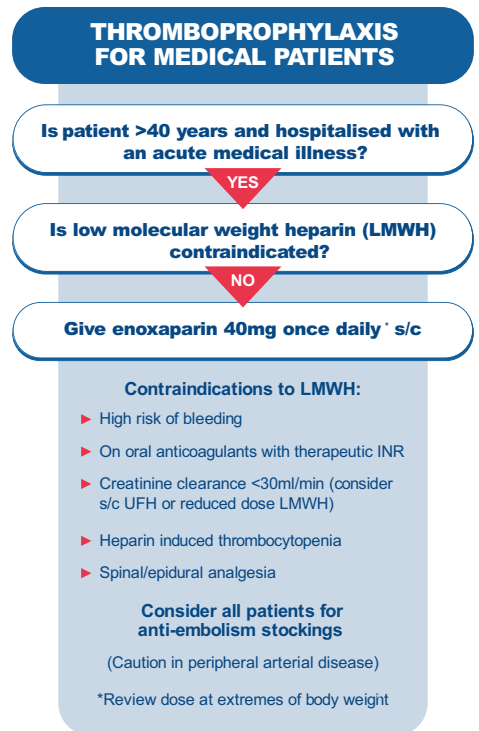


Figure 11. Risk assessment model employed for medical patients at King's College, London.

Summary

At a national level, the CMO has appointed an Implementation Working Group to provide guidance on how to implement the recommendations on VTE prevention in the NHS and will offer more advice on the ideal risk assessment approach. Locally, the formation of Thrombosis Committees and the introduction of risk assessment using local protocols for all hospitalised patients will begin this process. VERITY, the national VTE registry, will continue to play a role in these activities, generating valuable data and providing educational materials.

References

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