Venous Thromboembolism: Mechanisms, Treatment, and Public Awareness

Awareness and Politics of Venous Thromboembolism in the United Kingdom

Beverley J. Hunt

Because of travelers’ thrombosis, hard campaigning, and lobbying, the awareness of venous thromboembolism is markedly improving within the United Kingdom. The present improvements relate directly to championing of the cause by a charity and British politicians. This article summarizes the story of the awakening, which had occurred since 2000.

Beginnings


In September 2000 the death of a 28-year-old woman, Emma Kristofferson, who collapsed and died from a pulmonary embolism after leaving a 20-hour flight from Sydney to Heathrow airport provoked a media furore. Since that time there have been numerous articles in the British press about travel & deep vein thrombosis (DVT), such that the average informed member of the public is aware of the initials DVT but relates risk to travel. The words “economy class syndrome” and “travelers thrombosis” have entered common parlance. A Lifeblood commissioned MORI poll of more than 2000 people in the UK in 2006 showed that more than 50% of the population could associate leg pain and swelling with the word thrombosis.

The issue of travelers’ thrombosis was also picked up by the House of Commons Science and Technology Committee in their report on Air Travel and Health in 2001, and after hearing evidence from experts they demanded the airlines provided more information. John Smith MP, Labor member for the Vale of Glamorgan, from experts they demanded the airlines provided more information. Tony Blair, British Prime Minister, 1997 to 2007. In September 2000 the death of a 28-year-old woman, Emma Kristofferson, who collapsed and died from a pulmonary embolism after leaving a 20-hour flight from Sydney to Heathrow airport provoked a media furore. Since that time there have been numerous articles in the British press about travel & deep vein thrombosis (DVT), such that the average informed member of the public is aware of the initials DVT but relates risk to travel. The words “economy class syndrome” and “travelers thrombosis” have entered common parlance. A Lifeblood commissioned MORI poll of more than 2000 people in the UK in 2006 showed that more than 50% of the population could associate leg pain and swelling with the word thrombosis.

The politics

“A week is a long time in politics.” Harold Wilson, British Prime Minister, 1964 to 1970 and 1974 to 1976. I, representing Lifeblood & Prof Ajay Kakkar of the Thrombosis Research Institute, had a meeting with members of the House of Commons Select Committee in September 2004 to highlight the failure of implementation of hospital thromboprophylaxis. Dr Richard Taylor Independent MP for Wyre Forest and Health Select Committee member took up the cause and asked for an Emergency Health Select Committee hearing. A hearing on “The prevention of venous thromboembolism in hospitalized patients” was held on December 8, 2004. The HSC heard and published a report in March 2005 on how there are at least 25 000 deaths attributable to venous thromboembolism (VTE) a year in the UK, more than the combined deaths attributable to breast cancer, HIV, and road traffic accidents.

The HSC published a report in March 2005 on how there are at least 25 000 deaths attributable to venous thromboembolism (VTE) a year in the UK, more than the combined deaths attributable to breast cancer, HIV, and road traffic accidents. At least 50% of the deaths were related to hospital admission and yet despite the large evidence-base of the benefits of thromboprophylaxis it was not being effectively implemented in the UK, with rates as low as 20% of eligible patients and many health care professional ignorant of the risks. The many recommendations of the HSC report included the establishment of champions of thromboprophylaxis in UK hospital through “thrombosis committees, increased education for doctors, and a wish to mandate thromboprophylaxis.” After a HSC the Chief Medical Officer (CMO) is obliged to respond. Sir Liam Donaldson, our present CMO, in his report in July 2005 agreed with every point of the HSC report (this is unique for a HSC report, as usually only a few points are taken up). He agreed that VTE has for many years been a “Cinderella issue,” and he wrote to all doctors in July 2005 informing them of the good practice guidelines available at that time and commissioned the National Institute for Clinical Excellence to produce guidelines for all hospitalized patients, not just the surgical guidelines they were working on at the time.

He set up an independent VTE Expert Working Group (EWG; on which I sat), to report back to him how present best practice and guidance could be promoted and implemented, and on what resources might be needed to support delivery of a strategy through existing structure. The EWG reported back to the Chief Medical Officer in October 2006 but the report was not finally published until April 2007, unaccountably delayed despite much lobbying from Lifeblood, the All Party Parliamentary Thrombosis Group, and the HSC.

The EWG gave recommendations for thromboprophylaxis stating that all hospital inpatients need mandatory VTE risk assessment on admission and recommends that this VTE risk assessment be embedded within the Clinical Negligence Scheme for Trusts. The EWG said that all medical and moderate- to high-risk surgical patients should be considered for thromboprophylaxis.
phyllaxis with low-molecular weight heparin as the preferred option over mechanical methods. Furthermore, the EWG recommended the establishing of thrombosis teams within hospitals to ensure implementation of these initiatives, with the possibility of punitive actions for hospitals poorly performing in this area.

**Slow Progress**

“Consensus is the process of abandoning all beliefs and adhering to one which no one believes in but no one objects to.” Margaret Thatcher, British Prime Minister, 1979 to 1990.

The week after the EWG report was published, the NICE guidelines for surgical patients were issued. Although they had been commissioned to cover only high-risk surgical patients, the final guidelines covered all surgical patients. By setting the age of intervention at 60 rather than 40 years of age, and favoring mechanical methods over pharmacological, those at moderate risk—those between 40 to 60 years of age without a major risk factor—will receive stockings rather than pharmacological methods if the NICE guidelines are applied. This is in disagreement with all other international guidelines and the EWG recommendations. This caused some disquiet among experts; moreover the British Orthopedic Association did not agree with the final outcome.

Currently, NICE are writing guidance for all other hospital patients and will review the surgical guidelines with production in 2009. The CMO has set up an Implementation Group to lead the national implementation strategy and develop a national risk assessment tool also by 2009.

John Smith MP now leads the All Party Parliamentary Thrombosis Group. They, like Lifeblood, were concerned that despite the CMO’s report and NICE guidelines there was still failure of thromboprophylaxis. In 2007, aided by Lifeblood, they surveyed the 173 Acute Hospital Trusts in England. 140 Trusts responded, and a report was published in November. This report showed that more than two-thirds of NHS Trusts admit to not having in place a documented risk assessment for VTE of every hospital patient on admission as recommended by the CMO and NICE guidelines. Of the 52% of UK hospitalized patients at risk of developing DVT, less than half will be made aware of the risks and only one third assessed by a healthcare professional to confirm whether they should receive thromboprophylaxis.

Lifeblood is anxious that all the political momentum and good will generated by the 2004/5 HSC is still not translating into thromboprophylaxis for all patients. Moreover, revised extrapolated figures on the death rate attributable to VTE in the UK is 60 000 not 25 000 per annum, suggesting the hospital death rate may be even greater than that quoted by the HSC.

**More Public Awareness**

“Attitude is a little thing that makes a big difference.” Winston Churchill, British Prime Minister, 1940 to 1945 and 1951 to 1955. Lifeblood held its fifth birthday party in the House of Commons in November 2007. The charity is in a very healthy position, and while we continue with two aims of increasing awareness of thrombosis and research fund, we are campaigning to ensure hospital thromboprophylaxis is mandated in the UK.

The charity grew very quickly thanks to Linda Barker, a celebrity designer who made Lifeblood her chosen charity when she went into the Australian jungle in 2002 for the program “I’m a Celebrity, get me out of here.” Increasing numbers of the public are running, swimming, cycling, and holding coffee mornings for us, and we obtain grants for pharmaceutical companies for specific projects. We now have employed a part-time administrator.

We instituted an annual UK “National Thrombosis week” in 2005. In this May week we promote thrombosis awareness through the media. In 2006 we were particularly successful and hit the headlines for many national newspapers and TV news with the issue of “e” thrombosis (VTE secondary to prolonged sitting in front of a computer). Overall 22 million of the UK public were exposed to VTE that week. We are currently upgrading our website and hope it will be the number one independent website for information on thrombosis for the public and health professionals. We are starting to offer small research grants as our coffers grow.

Our major aim for public awareness is to increase public knowledge of hospital acquired VTE. Currently the press run almost daily stories about the risks of hospital-acquired infection, which causes about 6000 deaths per year in the UK, and yet largely ignore the much greater risk of hospital-acquired VTE. With our dual aims of mandating hospital thromboprophylaxis and increasing public awareness, we hope that reluctant health professionals will be obliged to give thromboprophylaxis, caught between patients asking for it and managers demanding they do so to prevent the hospital from being penalized. We have much to do.

**Acknowledgments**

Thanks to all those who have contributed and are contributing to promoting awareness and helping to raise funds for research. In particular I thank the British MPs John Smith & Dr Richard Taylor for listening and acting, and Jackie Marr whose tireless energy turned a fledgling charity into a robust teenager.

**Disclosures**

B.H. has received educational grants from Bayer and Sanofi-Aventis to attend conferences, and also fees for lectures.

**References**

Awareness and Politics of Venous Thromboembolism in the United Kingdom
Beverley J. Hunt

doi: 10.1161/ATVBAHA.108.162586

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://atvb.ahajournals.org/content/28/3/398

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Arteriosclerosis, Thrombosis, and Vascular Biology can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Arteriosclerosis, Thrombosis, and Vascular Biology is online at:
http://atvb.ahajournals.org/subscriptions/