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EDITORIAL COMMENT

Prophylaxis of venous thromboembolism – The guidelines are there☆

Prevenção do tromboembolismo venoso – as recomendações estão aí...

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Venous thromboembolism (VTE) in its most common forms – deep vein thrombosis (DVT) and pulmonary embolism (PE) – is a well-known problem in hospitalized patients. It is the leading preventable cause of in-hospital death and results in considerable acute and chronic morbidity.[1]

It is thus extremely important to apply the existing guidelines on the prevention of VTE in the most vulnerable patients, those undergoing surgery.[2]

The multinational ENDORSE study, performed in the last decade, which assessed risk for VTE based on the American College of Chest Physicians (ACCP) guidelines, showed that in the nine randomly selected Portuguese hospitals included, 52.7% of patients were at risk of VTE (68.9% of surgical patients and 38.5% of medical patients). The rate of prophylaxis in patients at risk was 58.5%, but a third of both surgical and medical patients were also on prophylaxis despite not being at risk for VTE.[3,4]

Increasing awareness of this issue has prompted various initiatives in recent years by different entities. The Directorate-General of Health includes perioperative assessment of the indication for thromboprophylaxis in its guideline ''Cirurgia Segura Salva Vidas'' and has produced a guideline specifically for orthopedic surgery.[5] The European Respiratory Society (ERS), together with the US Joint Commission, includes thromboprophylaxis in its assessment of performance in various surgical fields.[6] More important in Portugal was the formation by the Portuguese Society of Anesthesiology of a multidisciplinary study group that produced guidelines for perioperative VTE prophylaxis,[7] based on an updated bibliographic review and on the ninth edition of the ACCP guidelines (2012)[8] and the UK's National Institute for Health and Care Excellence guidelines (2010, updated 2015).[9] These recommendations have been adopted by a significant number of Portuguese medical societies.

The TREVO study[10] is an analysis of a changing clinical situation. It studied a sample of 67 635 admissions for surgery in a central university hospital between 2008 and 2012, and herein, in my opinion, lies its greatest value. It has significant limitations, which are acknowledged by its authors, but both its weaknesses and its strengths are informative. In particular, it highlights the following points:

- Routine thromboprophylaxis for surgical patients improved steadily over the study period, with reduced overall risk of TVE and orthopedic surgery no longer posing an additional risk.
- There is a clear need for protocols to assess risk of TVE and bleeding in all surgical patients.
- A multidisciplinary approach is required that includes the patient's risk factors, the risk of the specific surgery to be performed (with or without central venous catheterization), and the type of anesthesia (neuraxial vs. general).
- Prevention of thromboembolism, as pointed out in the article,[10] is particularly complicated in neurosurgery, but

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also in cardiac surgery, in which the high bleeding risk requires specific measures.[11,12]

Conflicts of interest

The author has no conflicts of interest to declare.

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