

Addressing the Gap in VTE Prophylaxis in Paediatric Orthopaedics

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Dear Editor,

Venous thromboembolism (VTE) remains a rare yet potentially life-threatening complication in paediatric patients. While adult medicine emphasizes mandatory VTE risk assessment and thromboprophylaxis protocols, a comparable framework is notably absent in paediatric practice in Ireland. Our recent study, conducted at Children's Health Ireland, aimed to evaluate current familiarity and prescribing comfort regarding VTE prophylaxis among consultants and non-consultant hospital doctors (NCHDs) working in paediatric orthopaedics.

We surveyed 21 clinicians, including consultants, registrars, senior house officers and fellows, to assess their experience, knowledge, and confidence in prescribing VTE prophylaxis. Although 71% had previously managed a paediatric patient requiring VTE prophylaxis, only 10% felt comfortable prescribing it independently. This discrepancy highlights a significant gap between clinical necessity and practitioner readiness to prescribe.

Low molecular weight heparin (LMWH) was correctly identified as the first-line pharmacologic agent by 86% of respondents, with enoxaparin specifically named by 52%. However, only 57% were aware that no formal guideline currently exists within Children's Health Ireland. Despite this, 90% indicated a willingness to prescribe based on an evidence-based guideline if available.

Our findings echo international literature that underscores the need for individualized VTE risk assessment in paediatric populations, particularly among adolescents, post-pubertal children, and peri-operative orthopaedic cases with multiple risk factors such as prolonged immobilization, obesity, or hormonal therapy use^{1,2}. Guidelines from the Association of Paediatric Anaesthetists of Great Britain and Ireland, the University of Wisconsin Hospitals, and the Royal Children's Hospital Melbourne already recognize these high-risk categories^{3,4}.

Given the shortfalls in comfort and awareness demonstrated in our cohort, we advocate for the development and implementation of a local VTE prophylaxis guideline for paediatric

orthopaedics in Ireland. Such a framework would offer structured decision-making pathways and delineate when specialist input is warranted.

In conclusion, there is a consensus that the majority of paediatric orthopaedic patients do not require VTE prophylaxis. However, in Paediatric Trauma and Orthopaedics, particularly in the peri-operative period, there should be an awareness of when VTE prophylaxis should be considered. There should be a pathway via which these decisions can be discussed and appropriate clinical decisions made on a case-by-case basis.

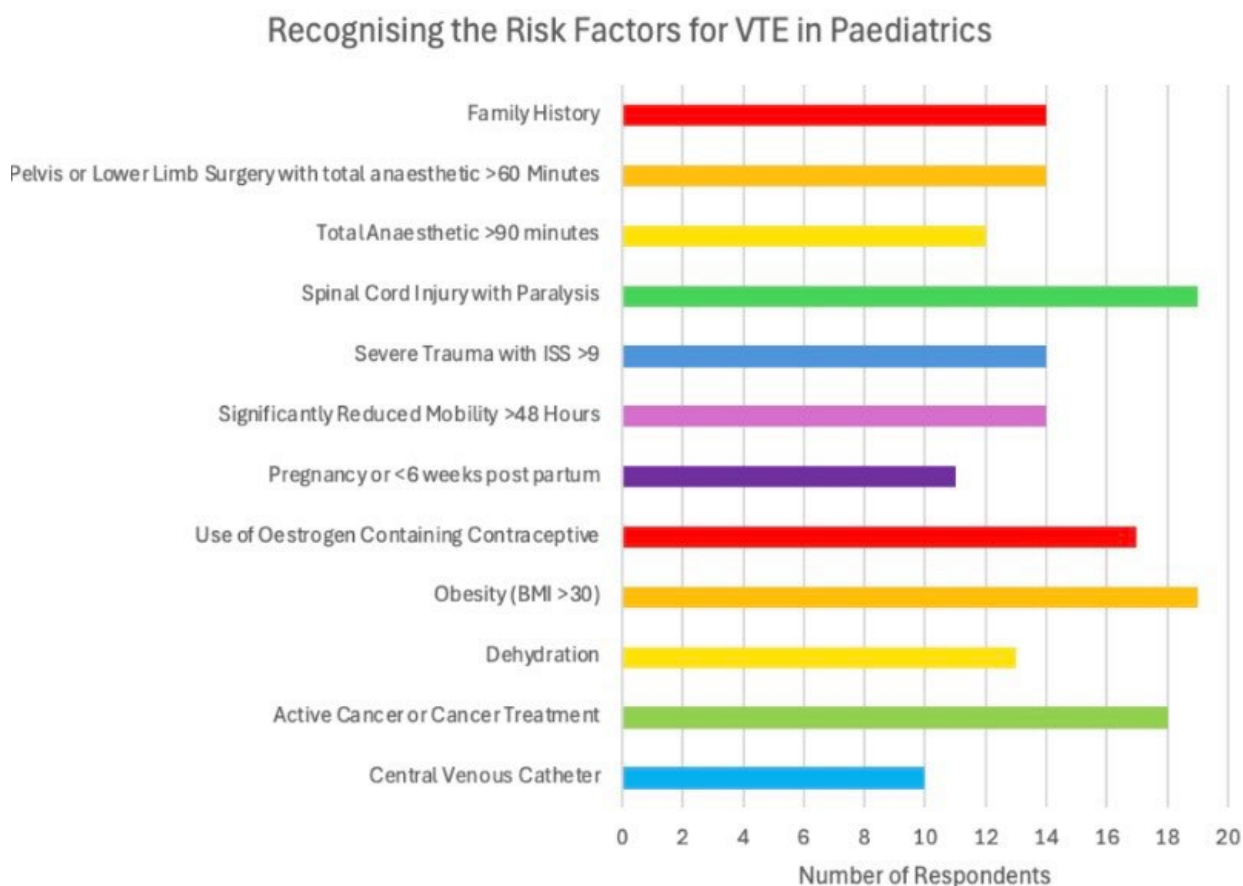


Figure 1: The number of respondents who correctly identified each of the above listed risk factors as a potential indication for venous thromboembolism prophylaxis in the paediatric population.

Declarations of Conflicts of Interest:

None declared.

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