Audit of use of Khorana score in oncology patients in Belfast trust

Dr Carrie Carson (CT2), Dr Gary Benson (Consultant Haematologist)

Introduction

Venous Thromboembolism (VTE) is a well-documented cause of morbidity and mortality in cancer patients. The Khorana score has been validated as a means of risk assessing patients who would benefit from primary prophylaxis; advising low molecular weight heparin if the Khorana score is ≥3.

Our aim was to audit if cancer patients in the Belfast trust were prescribed primary prophylaxis if they had a Khorana score of ≥3.

Methods

This audit retrospectively looked at all positive CT pulmonary angiography (CTPA) cases between January 2014 and December 2017 in the Belfast Trust. Cancer patients were identified and their Khorana score and evidence of VTE prophylaxis was gathered from their notes.

Results

5321 CTAs were performed in this period. 613 were identified with pulmonary embolisms (PE) of which 124 had a diagnosis of cancer and 54 of whom the Khorana score could apply. The mean age was 63, 56% were female, 44% were male. Of these 13% were local cancers, 24% with nodal spread, 44% were metastatic and extent of the disease was not clearly documented in 19%.

67% resulted in admission, with a mean hospital stay of 11 days. 15% had previously documented VTE and family history was poorly recorded in all cases.

7 patients were identified with a Khorana score of 3 or more. Only 1 was on primary prophylaxis, 1 already on an anticoagulant.

Discussion

This audit looked only at PE’s found by CTPA, it did not encompass incidental findings on staging CTs. The Khorana score was only applicable to small numbers of patients, however in these the standard of primary prophylaxis in high risk groups was not met. It is important to note however given the retrospective nature of this study, patients with Khorana score’s of ≥3 successfully avoiding VTE on primary prophylaxis would not be picked up. Of interest in this case 47 patients (87%) who had clots did not have a khorana score of ≥3, raising the question is there a more sensitive scoring system available? Also of note two patients who were prescribed primary prophylaxis still had a PE raising the question what is the optimum prophylactic dose?

Conclusions

The standard of primary prophylaxis for all Khorana score ≥3 was not met however the Khorana score was not predictive in this group of which patients would develop PE’s as a large majority of those who developed PE had a Khorana score of ≤3.

Contact

Dr Carrie Carson
Belfast Trust, Northern Ireland
Email: carriecarson01@gmail.com

References
