Venous Thromboembolism in setting of Inflammatory Bowel Disease: A multi-centric retrospective analysis

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INTRODUCTION

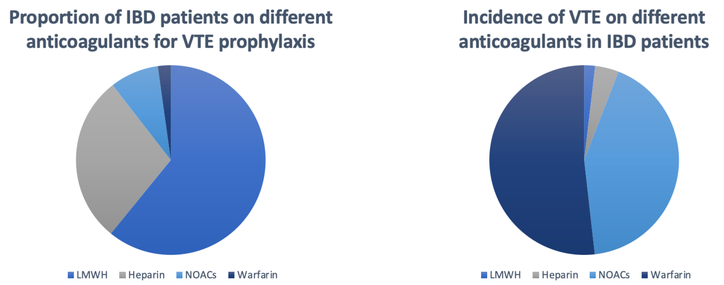
- Inflammatory bowel disease (IBD) is a systemic inflammatory condition with an increased risk of venous thromboembolism (VTE).
- The most common sites include deep veins of lower extremities and pulmonary vasculature, and rarely cerebrovascular veins which can significantly increase morbidity and mortality.[1]
- While the higher incidence of VTE in IBD has been well established, standardized risk assessment models for VTE do not consider the presence of IBD as a high-risk factor.

METHODS

- A retrospective chart review of 261 randomly selected patients with IBD over the last 5 years was performed. Patients with an incidence of VTE in the last 5 years (2017-2022) were identified.
- Baseline characteristics, site of VTE, use of anticoagulation for VTE prophylaxis, and anticoagulant used were collected.
- Descriptive statistics were used to analyze the incidence of VTE and the percentage of patients on anticoagulation.

RESULTS

- The 5-year incidence of VTE in the studied 259 patients was 13.51% (35) of which 11.2% (29) had DVT, 3.5% (9) had both DVT and PE, and 2.3% (6) had only PE.



Proportion of IBD patients on different anticoagulants and the incidence of VTE while on them

- The average age of the patients with VTE was 57.4 ± 12.3 years; 37% (13) were men and 63% (22) were women; 66% (23) were Caucasian, 31% (11) were African American, and 3% (1) were Pacific-islander.
- Of the 259 patients, 133 (51.4%) received VTE prophylaxis during hospitalizations, while 126 (48.6%) did not. Of the patients who received prophylaxis, the incidence of VTE was 4.5% (6 of 133) whereas the incidence was 23% (29 of 126) in those who did not receive VTE prophylaxis.
- Of the 133 patients who were on anticoagulation, 11 were on NOACs (8.3%), 38 were on heparin (28.6%), 81 were on LMWH (60.9%), and 3 were on warfarin (2.2%).
- Of the 6 patients who had an incidence of VTE on anticoagulation, 3 were on NOACs, 1 was on heparin, 1 was on LMWH, and 1 was on warfarin.

DISCUSSION

- Being a chronic inflammatory state, IBD is associated with a 2-3 times higher incidence of VTE.[2, 3]
- However, multiple factors exist in both the pathophysiology and treatment of the disease that may contribute to the development of VTE.[4]
- Numerous factors such as surgeries, use of steroids, and gender have been implicated in increasing the risk for VTE.
- There is a wide scope for further research regarding the same.
- Despite conclusive evidence, at most centers, the presence of IBD is not considered to be a high-risk factor for VTE warranting anticoagulation.
- Awareness and education are the cornerstones to cause a momentous change in practice patterns.

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