



Thromboembolism in Persons Living with HIV (PLWH): A Single Center Retrospective Cohort Study

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Introduction

- ❖ Data on risk of thromboembolism in PLWH is limited.
- ❖ HIV is often recognized as a chronic inflammatory disease and has been recognized as a prothrombotic condition.
- ❖ Aims: to analyze the incidence and demographic of venous thromboembolism such as pulmonary embolism and deep vein thrombosis in PLWH admitted to our hospital.

Methodology

Study Design

- ❖ Retrospective Cohort Study

Inclusion Criteria

- ❖ PLWH \geq 18 years old
- ❖ Admitted between 09/01/2018 and 09/01/2019
- ❖ Complete laboratory profile and well-defined clinical outcomes.

Exclusion Criteria

- ❖ Absence of above
- ❖ Were still inpatients on 5/25/2020

Analysis

- ❖ Demographic, clinical and laboratory data were reviewed and retrieved.
- ❖ Descriptive analysis, univariate and multivariate logistic regression methods
 - describe the demographic profile of PLWH with venous thromboembolism.

Results

Incidence of DVT/PE in PLWH admitted to our hospital during study period

- ❖ Out of the 192 hospitalized PLWH during the study period \rightarrow 15 (8%) patients had documented deep vein thrombosis (DVT) and/or pulmonary embolism (PE).
- ❖ Out of the 15 who developed DVT/PE
 - History of DVT/PE was present in 5 (33%) patients
 - New onset of DVT/PE was present in 10 (67%) patients
- ❖ Out of the 15 patients
 - 4 (27%) had DVT and PE,
 - 4 (27%) had only DVT and
 - 7 (46%) had only PE.

Demographic Analysis of PLWH with DVT/PE

- ❖ The median age was 57 years, ranged from 40 to 74 years
- ❖ 4 males and 11 females
- ❖ As for ethnicities, 2 Caucasian, 12 were African American and 1 Hispanic.

Results

Descriptive analysis, univariate and multivariate

- ❖ Average D-dimer: 4491
- ❖ For PLWH WITH venous thromboembolism
 - Median CD4 count was 487
 - Median viral load of 900
- ❖ For PLWH WITHOUT venous thromboembolism
 - Median CD4: 420
 - Median viral load: 140
- ❖ Though not statistically significance, higher viral load seems to associate with risk of venous thromboembolism.
- ❖ Female gender is an independent risk factor for venous thromboembolism in PLWH
 - (z-score 2.75, p=0.0059; odds ratio [OR], 4.67; 95% confidence interval [CI], 1.56-13.69).

Discussion and Conclusion

- ❖ Our observation of PLWH with venous thromboembolism suggest that this population has an increased risk of venous thromboembolism as compared to a general population.
- ❖ Female is an independent risk factor in this group of patient and higher viral load seem to associated with higher risk.
- ❖ Larger prospective studies in this population are needed to study the risk of venous thromboembolism in this group of patients.