

Thromboembolic Prophylaxis with Rivaroxaban in Patients with Chronic Thromboembolic Pulmonary hypertension: A Single Tertiary Care Center Experience from Istanbul, Turkey

Abstract

Introduction

Despite the increasing use of novel anticoagulant drugs (NOAC's) there is limited data about the efficacy and safety of NOAC' s in patients with chronic thromboembolic pulmonary hypertension (CTEPH). The aim of this study is to compare clinical effects of warfarin and rivaroxaban in patients with CTEPH.

Methods

A total of 97 CTEPH patients (mean age: 55.8 ± 14.6 ; 56.7 % male) were included in the study. The patients were divided into two group according to usage of warfarin (66 patients, 68%) and rivaroxaban (31 patients, 32%). Two groups retrospectively compared to regarding incidence of pulmonary embolism, deep vein thrombosis, major bleeding or minor bleeding. The median follow-up period was 18 months.

Results

There were no significant differences between the groups regarding incidence of recurrent pulmonary embolism and deep vein thrombosis. Although the HASBLED score and age were higher in the rivaroxaban group, the frequency of major and minor bleeding was similar between patients treated with warfarin and rivaroxaban. (table1).

Conclusion

The present study indicates that rivaroxaban as effective as warfarin for thromboembolism prevention in patients with CTEPH. Further large scale prospective studies are needed to evaluate clinical effects of NOACs in patients with CTEPH.

Table 1: Comparison of clinical features and events of study population

	Warfarin (n:66)	Rivaroxaban (n:31)	P value
Age, years	60±15.8	54.8±13.8	0.07
Gender, Female (%)	34 (51.5%)	21 (67.7%)	0.13
HASBLED	1±0.6	1.6±1	0.03
Pulmonary Embolism, n(%)	7 (10.6%)	3 (10%)	0.92
Deep vein thrombosis, n(%)	4 (6.5%)	0 (0%)	0.13
Major bleeding, n(%)	5 (7.6%)	1 (3.2%)	0.4
Minor bleeding, n(%)	23 (34.8%)	6 (19.4%)	0.12