

EVALUATING THE USE OF FONDAPARINUX AS PROPHYLAXIS THERAPY FOR VENOUS THROMBOEMBOLISM (VTE) IN PATIENTS WITH COVID-19

Introduction

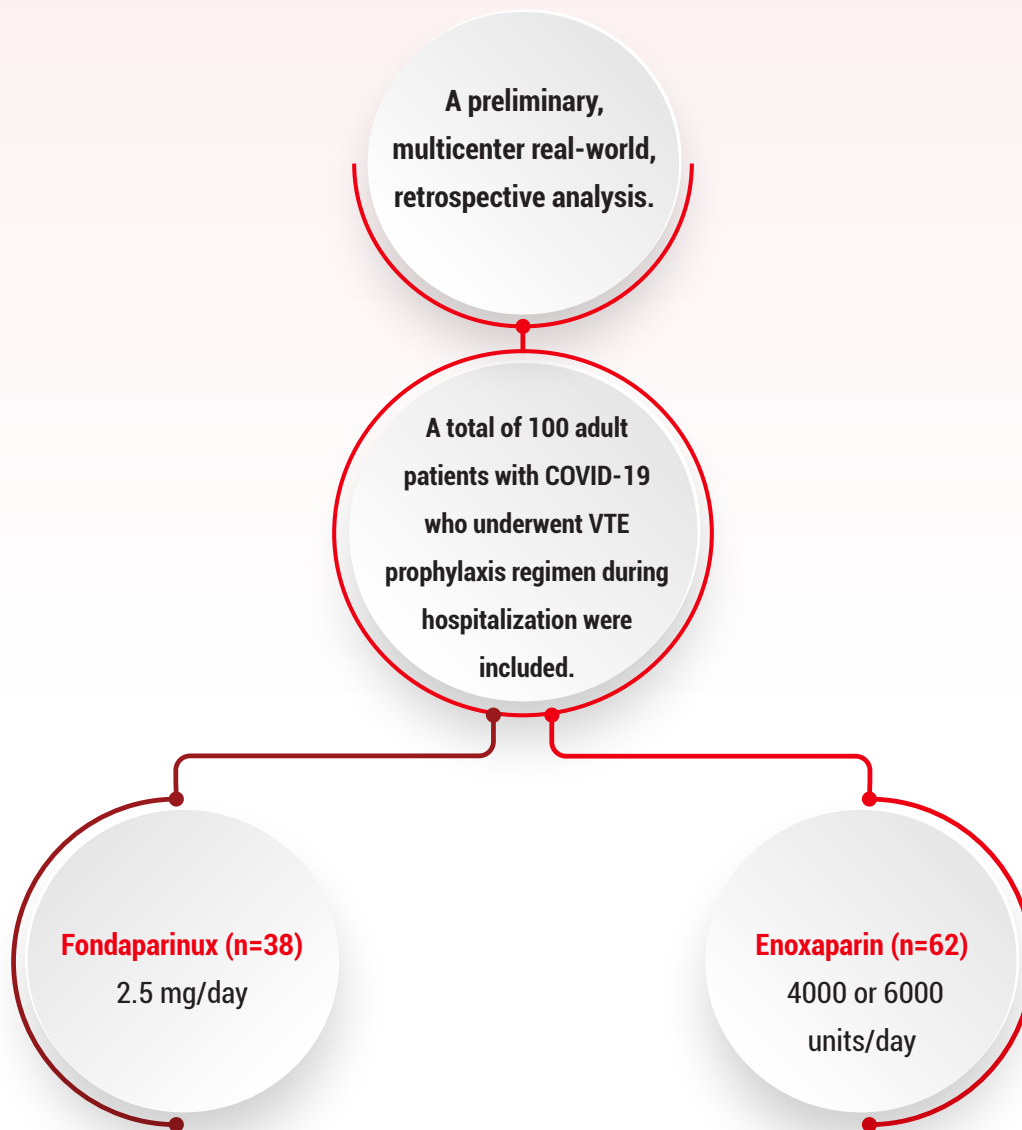
- ▶ There is a growing body of evidence indicating that hospitalized COVID-19 patients have high rates of coagulopathy and VTE.
- ▶ However, data on the possible link between antithrombotic therapies and COVID-19 clinical presentation or prognosis is limited.
- ▶ Anticoagulant thromboprophylaxis with low molecular weight heparin (LMWH) or fondaparinux is suggested for acutely ill patients with a high risk of thrombosis.
- ▶ Previous studies have reported better net clinical benefits from fondaparinux than LMWH in VTE prevention.

Objective

To evaluate the clinical impact of VTE prophylaxis with fondaparinux versus enoxaparin among hospitalized COVID-19 patients.



Study details



Outcome measured

Primary efficacy endpoint: Composite of pulmonary embolism (PE) and deep venous thrombosis (DVT).

Secondary efficacy endpoint: Incidence of acute respiratory distress syndrome (ARDS) and in-hospital mortality.

Primary safety endpoint: Composite of major bleeding (MB) and clinically relevant non-MB (CRNMB).

Results

- ▶ Both groups reported a relatively comparable incidence rate of venous thromboembolism (VTE). (Fig. 1)
- ▶ However, fondaparinux demonstrated numerically low incidences of
 - **Pulmonary embolism (PE) (Table)**
 - **Deep venous thrombosis (DVT) (Fig. 2)**

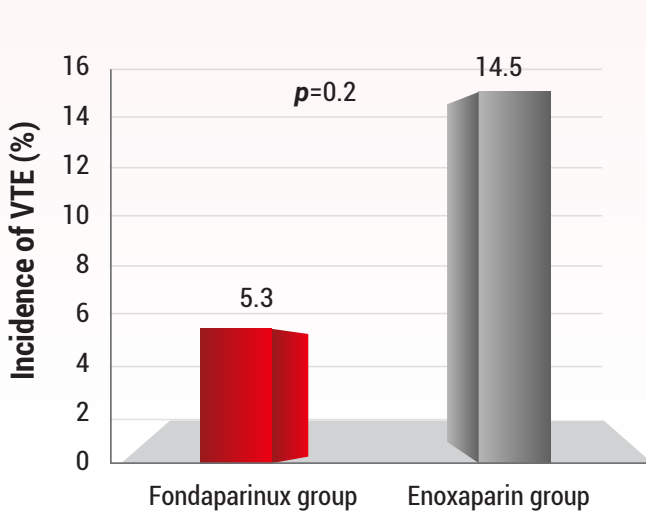


Figure 1: Incidences of VTE across both groups

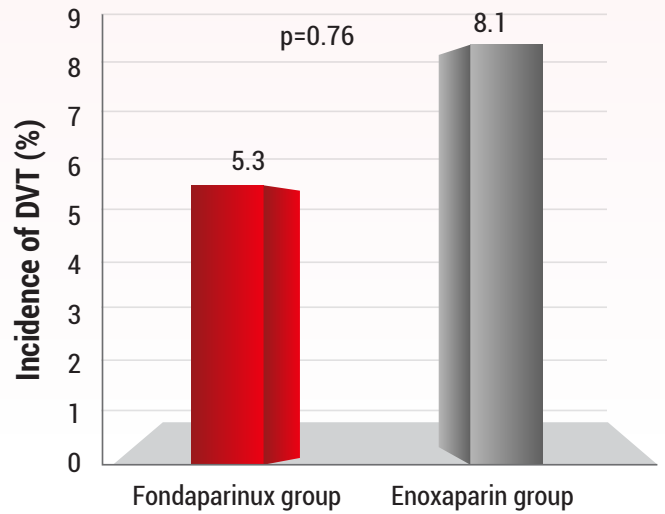


Figure 2: Incidences of DVT across both groups

- ▶ There was no significant correlation observed between both anticoagulant drugs and increased risk of (Table):
 - **Overall bleeding**
 - **ARDS**
 - **In-hospital mortality**

Table: Efficacy and safety outcomes in both groups

Outcome events (%)	Fondaparinux group	Enoxaparin group	Univariate analysis OR	P-value
PE	0	6	-	0.12
Overall bleeding	5.3	3.2	0.60	0.76
MB	2.6	1.6	-	0.73
CRNMB	2.6	1.6	-	0.73
ARDS	15.8	17.7	1.15	0.83
All-cause death	10.5	9.7	0.91	0.97

Conclusion

Treatment with 2.5 mg/day fondaparinux was found to be effective and safe among COVID-19 patients hospitalized in internal medicine units.



Take home points

- 1 Previous studies have reported better net clinical benefits from fondaparinux than LMWH in venous thromboembolism (VTE) prevention.
- 2 The present study retrospectively analyzed the clinical impact of fondaparinux and enoxaparin in COVID-19 patients.
- 3 The difference in the incidence of VTE was insignificant in both groups.
- 4 However, fondaparinux treatment reported numerically lower frequencies of pulmonary embolism (PE) and deep vein thrombosis (DVT).
- 5 The study drugs were not significantly correlated to the increased risk of bleeding events, ARDS, and in-hospital mortality.

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For the use of a Registered Medical Practitioner or a Hospital or a Laboratory.

Reference:

Russo V, Cardillo G, Viggiano GV, Mangiacapra S, Cavalli A, Fontanella A, et al. Fondaparinux Use in Patients With COVID-19: A Preliminary Multicenter Real-World Experience. *J Cardiovasc Pharmacol*. 2020 Oct;76(4):369-371.

1. Fondaparinux Product Monograph -

file:///D:/Rajesh/Fondared/Campaigns/Did%20You%20Know/References/Did%20you%20know%2011%20Ref/2.%20Fondaparinux%20Product%20Monograph.pdf

*DVT - Deep Vein Thrombosis