

# Prevalence of non-COVID-19 venous thromboembolism during SARS-CoV-2 outbreak: our experience

 Ana Marija Slišković\*

 Mislav Puljević,

 Ana Šutalo,

 Ante Bosnić,

 Ljiljana Banfić,

 Majda Vrkić Kirhmajer

University of Zagreb School of Medicine, University Hospital Centre Zagreb, Zagreb, Croatia

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**\*ADDRESS FOR CORRESPONDENCE:** Ana Marija Slišković, Klinički bolnički centar Zagreb, Kišpatičeva 12, HR-10000 Zagreb, Croatia. / Phone: +386-99-4089160 / E-mail: [sliskovic\\_anamarija@yahoo.com](mailto:sliskovic_anamarija@yahoo.com)

**ORCID:** Ana Marija Slišković, <https://orcid.org/0000-0001-6622-7572> • Mislav Puljević, <https://orcid.org/0000-0003-1477-2581> Ana Šutalo, <https://orcid.org/0000-0002-7644-6362> • Ante Bosnić, <https://orcid.org/0000-0003-4019-3874> Ljiljana Banfić, <https://orcid.org/0000-0002-4538-8980> • Majda Vrkić Kirhmajer, <https://orcid.org/0000-0002-1340-1917>

**Background:** In March 2020 formally declared pandemic of coronavirus disease (COVID-19) caused a global impact on public health. Venous thromboembolism (VTE) encompassing pulmonary embolism (PE) and deep venous thrombosis (DVT) is frequently observed in patients with COVID-19<sup>1</sup>, while the pandemic influence on non COVID-19 VTE prevalence remains unknown. Previous meta-analysis supported an association between regular physical activity and lower risk of VTE when compared with a sedentary or less active lifestyle<sup>2</sup>. *Aim:* to investigate the influence of pandemic circumstances on the prevalence of non COVID-19 patients hospitalized due to VTE.

**Patients and Methods:** Single centre retrospective analysis of consecutive non COVID-19 patients admitted for VTE was performed. We compared demographic characteristics and diagnostics findings in patients hospitalized for VTE between 1st of March and 31st of October 2019 and non COVID-19 VTE patients hospitalized between the same period in 2020. All patients underwent laboratory tests, venous ultrasonography of the lower limbs and/or CT pulmonary angiography and had negative swab test for SARS-CoV2 at admission. One patient had previously recovered from COVID-19.

**Results:** During the period of 8 months 70 VTE patients (female 48 %, mean age 60.8 ± 17.2 years) were admitted in 2019, while 86 non COVID-19 VTE patients (female 50 %, mean age 68.5 ± 16.8 years) were admitted in 2020. There was no significant difference in prevalence of VTE hospitalization (4.1 % vs 5.4%, p=0.106), but patients in 2020 were significantly older (p=0.002). Dividing the VTE cases into isolated PE, isolated DVT and combined DVT+PE we found a significant increase in prevalence of DVT+PE during pandemic (34 vs 36, p=0.23; 23 vs 25, p=0.24 and 13 vs 25, p=0.03, respectively).

**Conclusion:** During COVID 19 pandemic we observed significant increase in prevalence of hospitalized non COVID-19 patients with combined DVT+ PE but not with isolated PE or isolated DVT. Possible explanation could be a less active lifestyle due to pandemic social restriction recommendation and delaying treatment for initial DVT.

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## LITERATURE

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