

Epidemiology of Pulmonary Embolism in Latvian Patients Enrolled in RIETE Registry

Dana Kigitoviča, Eva Dručka¹, Alberts Belovs, Andris Skride

Rīga Stradiņš University, Latvia

¹Rīga Stradiņš University, Department of Internal Diseases, Latvia

Introduction. Acute venous thromboembolism, including deep vein thrombosis and pulmonary embolism (PE), is a common disorder with an annual incidence of approximately 1 or 2 cases per 1000 persons in general population [Monreal et al., 2015].

Aim, Material and Methods. The aim of the paper was to characterise pulmonary thromboembolism by age, gender, clinical presentation and predisposing factors in Latvian patients enrolled in RIETE Registry. We conducted a prospective cohort study that collected data from patients enrolled in the RIETE registry. All patients provided written consent for participation in the registry in accordance with local ethics committee requirements. The study population includes consecutive patients with symptomatic PE, confirmed by CT pulmonary angiography. All data were analysed by SPSS 20.0.

Results. Our study included 109 patients with diagnosis of PE in a single university hospital between August 2014 and December 2015. The age of patients ranged from 23 to 92 years. The mean age of standard deviation (SD) was 64.4 ± 17.0 [95% confidence interval (CI) = 61.2–67.6] years. Patients aged under 50 years – 20.2% [12.7–27.7], predominant age was 70–79 years and included 33.0% [24.2–41.8] patients. Among 109 patients, 69 or 63.3% [54.3–72.4] were females with the mean age of 68.0 ± 15.9 [64.2–71.9] years and Body Mass Index (BMI) of 31.7 ± 6.9 [30.0–33.4] and 40 or 36.7% [27.7–45.8] were males with the mean age of 58.3 ± 17.2 [52.7–63.8] years and BMI – 27.1 ± 5.3 [25.4–28.8]. Current smokers at the time of diagnosis were 21.5% [13.7–29.3]. The most common clinical presentation was dyspnea 92.5% [87.5–97.5], followed by chest pain – 49.1% [39.6–58.6] and cough – 42.1% [32.8–51.5]. The other symptoms were swollen limbs – 31.8% [23.0–40.6], painful limbs – 24.5% [16.3–32.7], abdominal pain – 20.6% [12.9–28.3], syncope – 19.6% [12.1–27.1], fever – 14% [7.4–20.6], hemoptysis – 3.7% [0.1–7.3]. As predisposing factors for PE were mentioned leg varicosities – 36.1% [27.1–45.1], history of DVT or PE – 17.6% [10.5–24.8], surgical intervention in the past 2 months – 13 patients or 12% [5.9–18.1], immobility more than 4 days in the past 2 months – 8.3% [3.1–13.5], any travel > 6 hours in past 3 weeks – 7.4% [2.5–12.3], cancer – 8 cases or 7.3% [2.4–12.2], hormonal therapy in past 2 months – 5.7% [1.4–10.1], recent birth in past 2 months were mentioned in 1 patient.

Conclusions. Symptoms of PE are nonspecific. Therefore, one should always keep it as differential diagnosis. Pulmonary embolism is a condition that is diagnosed with difficulties in case of clinical suspicion.