

10.21 Pulmonary infiltrates with pulmonary embolism in hospitalized patients of Mid-West regional Hospital Ireland before and after Covid-19 pandemic: A comparative study

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Introduction: Pulmonary embolism (PE) is a potentially fatal disease with heterogeneous clinical presentation and outcome [1]. The Covid-19 disease outbreak in 2019 reached devastating proportions and is still posing a significant challenge to healthcare professionals all over the world. Since the pandemic, increasing number of studies has shown abnormal coagulation parameters in patients hospitalized with severe forms of Covid-19 infection, the risk for which is further increased after prolonged hospitalization in patients who are critically ill with the disease [2, 3]. The purpose of our study was to find out the presence of pulmonary infiltrates on CTPA in patients with confirmed pulmonary embolism before and during Covid-19 pandemic.

Materials and Methods: In this comparative study we retrospectively searched the medical records for patients admitted during the period of January 2019 to May 2019, in University Hospital Limerick with confirmed PE on CTPA and compared the data to that of patients admitted with the similar clinical picture during the Covid-19 pandemic, in the period of Jan 2021 to May 2021. Presence of PE along with pulmonary infiltrates like ground glass opacities, airspace shadowing and consolidation were compared between these two groups.

Results: A total of 37 patients between the age of 22 and 90 years (mean age 56 years) were evaluated. Patients were selected on the basis of confirmed pulmonary embolism on CT pulmonary angiogram. PE was found in 13 patients in pre-pandemic group and in 24 patients in pandemic group. In patients with diagnosed pulmonary embolism, pulmonary infiltrates were found in 3 (23%) patients in pre-pandemic group and 11(46%) patients in pandemic group.

Conclusion: The presence of pulmonary infiltrates with PE during Covid-19 pandemic was increased which showed that Covid-19 increase the risk of pulmonary embolism.

Discussion: Respiratory tract infections including Covid-19 are a significant risk factor for pulmonary embolism and patients admitted with Covid-19 may prompt early investigation with CT pulmonary angiography which can help in early diagnosis and treatment of disease thereby preventing major complications and may aid in decreasing mortality and morbidity [4,5].

Keywords:

Pulmonary embolism, Covid-19 pandemic, venous thromboembolism

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