

INTISARI

Insidensi dan Keluaran Klinis Emboli Paru pada Pasien COVID-19: Rapid Review

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Latar belakang

Coronavirus Disease-19 (COVID-19) merupakan penyakit yang menjadi pandemi bagi dunia sejak awal tahun 2020 dan dideklarasikan sebagai pandemi pada 11 Maret 2020. COVID-19 pertama kali muncul di kota Wuhan, China pada Desember 2019 dan dinyatakan sebagai pandemi global oleh *World Health Organization* (WHO). Gejala dari COVID-19 yang umum ditemukan adalah demam, batuk, nyeri otot atau kelelahan. Namun, COVID-19 menimbulkan manifestasi baru seperti koagulopati yang menyebabkan risiko terjadinya Emboli Paru. Emboli Paru merupakan salah satu bentuk dari venous thromboembolism (VTE) yang bisa mematikan tergantung dari derajat obstruksi. Penelitian ini akan meninjau insidensi dan keluaran klinis dari emboli paru pada pasien COVID-19 berdasarkan penelitian yang telah ada dengan metode *rapid review*.

Objektif

Mengetahui insidensi dan keluaran klinis pasien yang mengalami emboli paru pada pasien COVID-19.

Metode

Penelitian ini berupa *rapid review* atau tinjauan pustaka yang akan mengonsolidasikan data insidensi dan keluaran klinis dari emboli paru pada pasien COVID-19 berdasarkan literatur ilmiah yang telah ada di PubMed dengan waktu publikasi dari Januari-Desember 2020. Pemilihan artikel akan diukur kualitasnya menggunakan *Joanna Briggs Institute (JBI) Checklist for Case Reports* dan *Cohort*. Kriteria inklusi adalah pasien yang terkonfirmasi positif COVID-19, semua umur dan jenis kelamin, adanya kejadian emboli paru, dan artikel yang memiliki tipe *case reports* atau studi observasional. . Kriteria eksklusi adalah artikel yang bukan *free full text*, menggunakan bahasa selain bahasa Inggris, sumber yang tidak memenuhi syarat, dan topik yang tidak relevan.

Hasil

Hasil tinjauan untuk insidensi emboli paru pada pasien COVID-19 di Italia 4,7%, di Spanyol 9,46%, di Perancis 20,6%. Hasil tinjauan dari kumpulan *case report* didapatkan pasien sembuh/membaik 89,47% dan meninggal 10,53%. Hasil tinjauan kumpulan *cohort retrospective* didapatkan 20 meninggal, 5 dipulangkan, 14 mengalami komplikasi, 32 berada di ICU, 25 dipasang ventilasi mekanis invasif, 2 dipasang ventilasi non-invasif, 8 dipasang *nasal cannule high flow*.

Kesimpulan



Data insidensi pasien COVID-19 yang mengalami emboli paru cenderung masih sedikit dimana hanya ditemukan sejumlah tiga jurnal yang membahas insidensi pasien COVID-19 yang mengalami emboli paru. Keluaran klinis pada pasien COVID-19 yang mengalami emboli paru bermacam-macam, didapatkan *case report* 2 dari 19 pasien meninggal, sisanya sembuh.

Kata Kunci : insidensi, keluaran klinis, emboli paru, COVID-19.

ABSTRACT

Incidence and Clinical Outcome of Pulmonary Embolism in COVID-19

Patient : a Rapid Review

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Background

Coronavirus Disease-19 (COVID-19) is a worldwide pandemic that has been announced since early 2020. The World Health Organization named COVID-19 a global pandemic after it first occurred in the city of Wuhan, China, in December 2019. (WHO). Fever, cough, muscle pains, and lethargy are typical COVID-19 symptoms. COVID-19, on the other hand, generates additional symptoms including coagulopathy, which can lead to pulmonary embolism. Pulmonary embolism is a type of venous thromboembolism (VTE) that, depending on the degree of obstruction, can be lethal. Using the rapid review method, this study will examine the incidence and clinical outcome of pulmonary embolism in COVID-19 patients.

Objective

To know the incidence and clinical outcomes of pulmonary embolism patients in COVID-19 patients.

Methods

This research is in the form of a rapid review or literature review that will consolidate data on the incidence and clinical outcomes of pulmonary embolism in COVID-19 patients based on the scientific literature that already exists in PubMed with a publication time of January-December 2020. The selection of articles will be measured for quality using the Joanna Briggs Institute. (JBI) Checklist for Case Reports and Cohorts. Inclusion criteria were patients who were confirmed positive for COVID-19, all ages and genders, the incidence of pulmonary embolism, and articles that had case reports or observational studies. . Exclusion criteria are articles that are not free full text, use languages other than English, sources that do not meet the requirements, and topics that are not relevant.

Results

The results of the review for the incidence of pulmonary embolism in COVID-19 patients in Italy were 4.7%, in Spain 9.46%, in France 20.6%. The results of the review from the case report collection showed that 89.47% of patients recovered/improved and 10.53% died. The results of a retrospective cohort review showed that 20 died, 5 were discharged, 14 had complications, 32 were in the ICU, 25 were placed on invasive mechanical ventilation, 2 were placed on non-invasive ventilation, and 8 were fitted with a high-flow nasal cannula.

Conclusion



The data on the incidence of COVID-19 patients with pulmonary embolism tended to be scanty where only three journals were found that discussed the incidence of COVID-19 patients with pulmonary embolism. Clinical outcomes for COVID-19 patients with pulmonary embolism varied, case reports obtained 2 of 19 patients died, the rest recovered.

Keywords: *incidence, clinical outcome, pulmonary embolism, COVID-19.*