ABSTRAK

Hubungan Karakteristik Klinis dan Gambaran Gejala Gastrointestinal dengan Derajat Keparahan dan Mortalitas pada Pasien COVID-19 di RSUP Dr. Kariadi Semarang

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Pendahuluan: Beberapa gejala gastrointestinal pada COVID-19 yang sering dikeluhkan meliputi anoreksia, diare, mual muntah, nyeri perut, hematemesis, melena, serta konstipasi. Manifestasi gastrointestinal pada COVID-19 dilaporkan berkisar antara 11,4-61,1% dari kasus COVID-19. Beberapa studi menemukan bahwa gejala gastrointestinal merupakan faktor risiko yang signifikan terhadap mortalitas, admisi ICU dan durasi rawat inap yang lebih panjang.

Tujuan: Menganalisis hubungan karakteristik klinis dan gambaran gejala gastrointestinal dengan derajat keparahan dan mortalitas pada pasien COVID-19 di RSUP Dr. Kariadi Semarang.

Metode: Penelitian kohort retrospektif melibatkan 2000 pasien terkonfirmasi COVID-19, dimana 1000 pasien memiliki gejala respirasi dan 1000 pasien lainnya memiliki gejala respirasi dan gastrointestinal. Variabel bebas penelitian adalah usia, jenis kelamin, manifestasi klinis gastrointestinal. Variabel terikat adalah derajat keparahan COVID-19 dan mortalitas COVID-19. Variabel perancu adalah jenis komorbid pasien. Analisis dilakukan menggunakan uji Chi-square dengan continuity correction. Hasil signifikan apabila $p < 0.05$.

Hasil: Usia pasien COVID-19 memiliki rerata 45.6 tahun yang didominansi oleh kelompok usia >50 tahun (41.9%). Sebagian besar pasien adalah laki-laki (53.5%) dengan derajat penyakit COVID-19 terbanyak dilaporkan adalah derajat ringan (59.3%). Gejala gastrointestinal yang paling banyak ditemukan adalah mual (39,2%), muntah (31,8%) dan diare (18,4%). Mual secara signifikan lebih banyak ditemukan pada usia tua (p<0.001), COVID-19 derajat sedang-berat (p=0.010), dan mempengaruhi status mortalitas (p<0.001). Gejala gastrointestinal (>1 gejala) paling banyak dilaporkan pada subjek dengan COVID-19 derajat berat (p=0.007) dan subjek yang meninggal diakhir penelitian (p<0.001). Terdapat hubungan antara komorbid diabetes melitus (p<0,001), hipetensi (p<0,001), penyakit jantung koroner (p<0,001) dan penyakit ginjal kronik (p=0,034) dengan derajat keparahan dan mortalitas pasien COVID-19.

Kesimpulan: Gejala gastrointestinal mual secara signifikan lebih banyak dilaporkan pada kelompok usia tua (>50 tahun), COVID-19 derajat sedang-berat, dan berhubungan dengan status mortalitas. Jumlah gejala gastrointestinal ($\geq$1 gejala) memiliki hubungan signifikan dengan derajat keparahan dan status mortalitas COVID-19. Adanya komorbid diabetes melitus, hipertensi, penyakit jantung koroner dan penyakit ginjal kronik memiliki hubungan signifikan dengan derajat keparahan dan status mortalitas COVID-19.

Kata kunci: Gejala gastrointestinal, COVID-19, derajat keparahan, kematian

ABSTRACT

The Correlation between Clinical Characteristics and Gastrointestinal Symptoms with the Severity and Mortality in COVID-19 Patients at RSUP Dr. Kariadi Semarang

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Introduction: Several gastrointestinal symptoms frequently reported in COVID-19 include anorexia, diarrhea, nausea, vomiting, abdominal pain, hematemesis, melena, and constipation. Gastrointestinal manifestations are observed in approximately 11.4-61.1% of COVID-19 cases. Various studies have identified gastrointestinal symptoms as significant risk factors for mortality, ICU admission, and prolonged hospitalization.

Aim: Analyzing the involvement of clinical characteristics and overview of gastrointestinal symptoms in COVID-19 and the correlation with disease severity and outcomes at RSUP Dr. Kariadi Semarang.

Methods: The retrospective cohort study involved 2000 patients with confirmed COVID-19, of which 1000 patients had respiratory symptoms and the other 1000 patients had respiratory and gastrointestinal symptoms. The independent variables of the study were age, gender, and gastrointestinal clinical manifestations. The dependent variables are the severity and mortality of COVID-19. Confounding variables are the type of patient comorbidities. Analysis was carried out using the Chi-square test with continuity correction. Significant results if $p < 0.05$.

Results: The mean age of COVID-19 patients is 45.6 years, predominantly in the age group >50 years (41.9%). The majority of patients are male (53.5%), and the most common severity of COVID-19 reported is mild (59.3%). The most common gastrointestinal symptoms were nausea (39.2%), vomiting (31.8%), and diarrhea (18.4%). Nausea was significantly more common in older age groups ($p<0.001$), in cases of moderate to severe COVID-19 ($p=0.010$), and it impacts mortality status ($p<0.001$). Gastrointestinal symptoms (>1 symptom) are most commonly reported in subjects with severe COVID-19 ($p=0.007$) and in subjects who died at the end of the study ($p<0.001$). There is a significant correlation between comorbidities such as diabetes mellitus ($p<0.001$), hypertension ($p<0.001$), coronary artery disease ($p<0.001$), and chronic kidney disease ($p=0.034$) with the severity and mortality of COVID-19 patients.

Conclusion: Gastrointestinal symptoms of nausea were significantly more frequently reported in the elderly (>50 years old), in cases of moderate to severe COVID-19, and are associated with mortality. The presence of multiple gastrointestinal symptoms (>1 symptom) is significantly associated with the severity and mortality status of COVID-19. Furthermore, comorbidities such as diabetes mellitus, hypertension, coronary artery disease, and chronic kidney disease are significantly correlation with the severity and mortality status of COVID-19.

Keywords: Gastrointestinal symptoms, COVID-19, severity, mortality