**INTRODUCTION**

Review question / Objective: We compare the coagulation parameters between severe and mild cases of COVID-19 patients, including Platelet count (PLT), activated partial thromboplastin time (APTT), prothrombin time (PT) and D-dimer (D-D) levels. Coagulation parameters between survivors and non-survivors are also explored. We conducted meta regression to explore the risk factor of COVID-19-related coagulopathy.

Condition being studied: COVID-19 is widely spread and poses a critical threat to global health. Coagulopathy in severe patients of COVID-19 have been reported in several studies. Emerging evidence shows that severe COVID-19 can be complicated with coagulopathy, with high risk of disseminated intravascular coagulation, venous thromboembolism and other thrombotic events. We aim to conduct a systematic review and meta-analysis of coagulopathy in patients with COVID-19. Coagulopathy may be an indication of severity and poor prognosis. Clinicians should pay more attention to coagulopathy in COVID-19.
studies. Emerging evidence shows that severe COVID19 can be complicated with coagulopathy, with high risk of disseminated intravascular coagulation, venous thromboembolism and other thrombotic events. We aim to conduct a systematic review and meta-analysis of coagulopathy in patients with COVID19. Coagulopathy may be an indication of severity and poor prognosis. Clinicians should pay more attention to coagulopathy in COVID19.

METHODS

Search strategy: 1) "Covid-19" OR "2019 novel coronavirus infection" OR "SARS-CoV-2" AND "characteristics" (2) "Covid-19" OR "2019 novel coronavirus infection" OR "SARS-CoV-2" AND "coagulation" OR "coagulopathy" (3) "Covid-19" OR "2019 novel coronavirus infection" OR "SARS-CoV-2" AND "coagulation".

Participant or population: Patients with COVID19.

Intervention: Observational study: serve group.

Comparator: Mild group.

Study designs to be included: We included all research articles in adult patients diagnosed with COVID-19 with information on coagulation and clinical grouping or outcome of the cl.

Eligibility criteria: Articles other than original research (e.g., review articles, letters, or commentaries); original research with samples below 20 or case reports and series; articles on research in pediatric populations.


Main outcome(s): The coagulation parameters including PLT, PT, APTT, D-dimer are evaluated.

Quality assessment / Risk of bias analysis: All the search results were evaluated according to Newcastle-Ottawa Scale.

Strategy of data synthesis: Meta-analysis is carried out using Stata14.0 software. Heterogeneity among studies is tested using the Cochran Chi-square test and I^2. When I^2 is less than 50% a fixed-effects model is used and when I^2 is more than 50%, a random-effects model is used.

Subgroup analysis: We conduct subgroup to patients from China and other country.

Sensibility analysis: Sensitivity analysis is conducted to determine the source of heterogeneity by excluding one study at a time.

Language: English.

Country(ies) involved: China.

Keywords: COVID19, coagulopathy, coagulation.

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