

Letter to the Editor

Headache may not be linked with severity of coronavirus disease 2019 (COVID-19)

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Dear editor,

Coronavirus disease 2019 (COVID-19) is a highly infectious disease. By March 10, 2020, COVID-19 was in over 109 countries having infected over 113,702 people.^[1] As the number of deaths keeps rising and with no vaccine, many countries are experiencing one of the most challenging times in their history.

We conducted a meta-analysis to understand the role of headache as a clinical presentation with the severity of COVID-19. Articles published in English and Chinese were searched on PubMed. Each result was carefully screened, and only articles comparing the severity of COVID-19 used for our study. We used R-software (<https://www.r-project.org/>) to conduct the meta-analysis and design a forest plot.

After a thorough evaluation, seven articles^[2-8] were retained. Totally 1,495 patients presented as non-severe COVID-19 and 192 had headaches (Figure 1). Meanwhile, 94 of the 650 severe COVID-19 cases had a headache. The odds ratio (OR) was calculated as 1.32 (95% confidence interval [CI] 0.98–1.80). We conclude that the clinical presentation of headache in a COVID-19 patient cannot be used as a prognostic factor for severe COVID-19 disease. However, further analysis is recommended in the future with a larger sample size.

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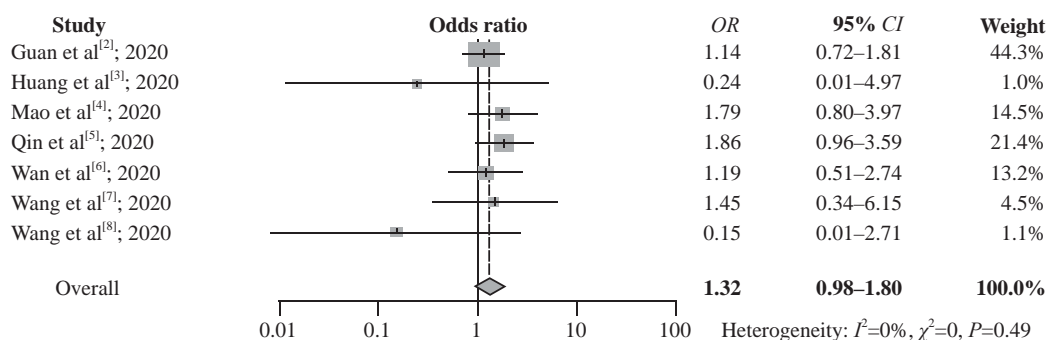


Figure 1. Association of headache with severity of COVID-19.