

LETTER TO THE EDITOR

Coronavirus disease-2019 in pregnancy with neurological manifestations versus pregnancy with eclampsia: Need for liberal testing to rule out the masquerades

Sir,

I read with interest the article by Gidlöf et al¹ on the management of a twin pregnancy with severe preeclampsia and Coronavirus disease-2019 (COVID-19) and their call for more liberal testing guidelines in women with high-risk pregnancies, and agree with their suggestion. A severe complication of preeclampsia is eclampsia. Presentations include neurological manifestations such as headache, seizures, and loss of consciousness, along with raised blood pressure. Hemolysis, elevated liver enzymes, thrombocytopenia, and renal dysfunction may also be present. Similar neurological and laboratory manifestations have been reported in patients with COVID-19.^{2,3} In a retrospective case series of hospitalized patients with COVID-19, Mao et al reported 36.4% of patients with neurological symptoms including headache, seizures, and loss of consciousness.² Although this occurred with greater frequency in patients with more severe disease, some patients showed other symptoms of COVID-19 only after neurological manifestations.² Low platelets and elevated liver enzymes are also seen in patients with COVID-19, including those with acute cerebrovascular manifestations.³

Three scenarios are possible: pregnant women with COVID-19 and neurological manifestations mimicking eclampsia; COVID-19 complicating preeclampsia/eclampsia; and pregnancy with eclampsia without COVID-19. Each scenario has different implications for management strategies and infection control practices. In the first instance, management should follow clinical recommendations for COVID-19 in pregnancy,⁴ with additional analysis of cerebrospinal fluid and management of cerebrovascular complications. In the second instance, guidelines for managing eclampsia should be followed after ruling out neurological involvement due to COVID-19. However, both of these situations entail proper infection control practices including caring for patients in dedicated COVID-19 areas with full safety measures taken to protect the healthcare providers. In the last instance, management of the patient needs only to follow the eclampsia protocol. All this is possible only if pregnant women presenting with neurological manifestations are screened and tested

for COVID-19 in the first instance. As the incidence of eclampsia is high in developing countries,⁵ there is a possibility of diagnosing every pregnant woman with seizures as eclampsia, and hence the other two situations could easily be missed. This may lead to both inappropriate management and additional infection risk to healthcare providers. I suggest that the COVID-19 testing guidelines should be expanded to include all pregnant women with neurological manifestations to ensure a safe outcome for both patients and healthcare providers.

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