

Letter to the Editor

Preterm delivery and hypertensive disorder of pregnancy were reduced during the COVID-19 pandemic: A single hospital-based study

Dear Editor,

To prevent the spread of novel coronavirus disease (COVID-19), lockdown has been performed worldwide. In Japan, the state of emergency was declared on April 8th and was lifted on May 25th. Many pregnant women have been resting or working from home to prevent themselves from acquiring the virus in various countries. We aimed to examine how this change affected perinatal complications in pregnant women.

Data on 153 pregnant women admitted to our hospital between April 1st and June 30th, 2020 due to perinatal complications or delivery were retrospectively reviewed and compared with 560 women hospitalized for the equivalent conditions within the same period from 2017 to 2019 (control group). Patients who tested positive of COVID-19, had

multiple pregnancies, or were referred from other institutions for emergency conditions were excluded. The proportion of hospitalized women due to preterm labor, preterm premature rupture of membrane (PROM), hypertensive disorder of pregnancy (HDP), and preterm delivery (before 37 gestational weeks) were compared between the two groups. Complications were diagnosed using the guideline published by the Japan Society of Obstetrics and Gynecology.¹

Figure 1 shows the percentage of women admitted for each complication in both groups. Reduction was observed in all four outcomes during the COVID-19 pandemic compared with previous years. In particular, the proportion of HDP and preterm delivery in the 2020 group were significantly lower than those in the control group ($P = 0.017$ and $P = 0.019$).

In June 2020, the Ministry of Health, Labour and Welfare decided to offer financial assistance to companies that provided a paid leave of absence for pregnant workers who wished to stay home for COVID-19 prevention, resulting in an increase of women resting at home. Previous reports on the effectiveness of bed rest have shown that singleton pregnancies without hypertension during pregnancy had no differences on preterm delivery incidence,² whereas patients with hypertension during pregnancy might benefit from it by reducing severe hypertension and preterm delivery.³ Our study indicated that staying home might be beneficial in pregnant women for preventing not only COVID-19, but also HDP and preterm delivery. Further research should be conducted in larger numbers.

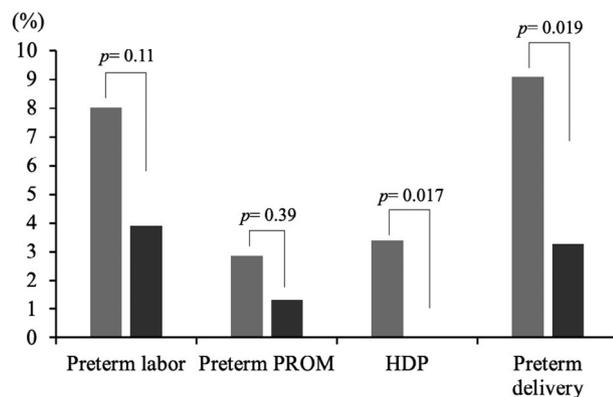


Figure 1 Comparison of perinatal complications between 2020 group and control group. Preterm labor, preterm premature rupture of membranes (PROM), hypertensive disorder of pregnancy (HDP) and preterm delivery were reduced during COVID-19 pandemic compared with before. Especially, the rate of HDP and preterm delivery in 2020 group were significantly lower than those in control group ($P = 0.017$ and $P = 0.019$). (■) Control group; (■) 2020 group

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Disclosure

None declared.

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