

of staffing and PPE. However, by universally testing patients before admission and determining isolation practices based on screening results, we were able to prevent transmission of SARS-CoV-2 within the perinatal ward while maintaining the function of a tertiary care hospital.

AUTHOR CONTRIBUTIONS

DO, YK, and MT were involved in the conceptualization, investigation, writing of the original draft, and editing and review of the manuscript. MI and SI were involved in the writing, review, and editing, and investigation of the study. MT was also responsible for the supervision of the study.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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Obstetrics

Rheumatic diseases during pregnancy and SARS-CoV-2: An appeal for medication adherence

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KEYWORDS: COVID-19; Pregnancy; Rheumatic diseases; Therapy

The coronavirus disease 2019 (COVID-19) pandemic, caused by a novel coronavirus (SARS-CoV-2), has raised concerns among physicians and their patients with rheumatic diseases (RDs) as the risk of infection was believed to be increased due to altered immune system activity that is typical of RDs and possibly worsened by glucocorticoids and immunosuppressive drugs.¹ An appeal for adherence to therapy was shared among rheumatologists, but special attention should be paid to pregnant women who suffer from RDs.

RDs during pregnancy are associated with adverse maternal and fetal outcomes,² and therapy discontinuation prompts a disease flare. Disease activity control during pregnancy is crucial for optimal obstetric management.² Interestingly, tumor necrosis factor alpha (TNF- α), interleukin-1 (IL-1), and interleukin-6 (IL-6), which are produced in

response to infections (such as COVID-19) and tissue injuries (such as RDs),³ are considered key cytokines for pathophysiology in the aforementioned diseases. Limited data are available regarding COVID-19 during pregnancy, but a tendency towards prematurity was reported,⁴ and this may be due to a release of pro-inflammatory cytokines in response to the virus, a process that is well recognized as a pivotal cause of preterm delivery. Similarly, reports on other coronavirus infections during pregnancy, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), showed higher rates of spontaneous abortion, premature birth, and intrauterine growth restriction.⁴

At present, there is a lack of information about the impact of SARS-CoV-2 on pregnant women with RDs; however, according to expert

opinion for pregnant and non-pregnant RDs subjects, clinicians should promote adherence to therapy until specific studies are reported.¹ In fact, in cases of discontinuation of therapy during pregnancy in RDs patients, a flare of disease can prompt an increase of pro-inflammatory cytokines that may theoretically worsen maternal and pregnancy outcomes in case of SARS-CoV-2 infection. Furthermore, some anti-rheumatic drugs were proposed as a potential treatment for SARS-CoV-2 infection (namely hydroxychloroquine), although larger studies do not support this evidence.⁵ Because of this, a shortage of hydroxychloroquine was experienced in some countries, leaving RDs patients abruptly without drug access⁶; this might represent a critical aspect in pregnancy management. Therefore, it seems clear that further studies are warranted in this subset of RDs patients in terms of risk assessment, pregnancy outcomes, and disease control.

AUTHOR CONTRIBUTIONS

All three authors conceived and wrote the manuscript. MS took the lead in writing the manuscript; CS and EP provided relevant critical feedback.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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Obstetrics

Abdominal pregnancy during the COVID-19 pandemic

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KEYWORDS: Abdominal pregnancy; COVID-19; Decidual tissue; Ectopic pregnancy; Hemoperitoneum; Methotrexate

Abdominal pregnancy is a rare type of ectopic pregnancy with an incidence of 1:10 000 to 1:30 000 women.¹ Several different locations have been reported, including the pouch of Douglas, pelvic sidewall, bowel, broad ligament, omentum, and spleen.^{2,3} Most abdominal pregnancies are diagnosed after presenting with various complications; however, in a few cases it may remain asymptomatic and is rarely established before surgery.⁴ Institutional Review Board approval was not required for this case report; written informed consent was obtained.

A 33-year-old primigravida presented at 14 weeks of pregnancy with persistent abdominal pain lasting 15 days. The patient had not attended hospital sooner for fear of coronavirus disease 2019 (COVID-19) infection. The patient's history was unremarkable. On admission, hemoglobin serum level was 6 g/dL, blood pressure was 80/50 mm Hg, and serum beta-hCG level was 88 000 IU/L. The patient's lower abdomen was significantly tender at palpation. Ultrasonography revealed an empty uterus; however, a fetus with cardiac activity was evident posterior to the uterus between the intestinal