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## Approach to monkeypox in pregnancy: conjecture is best guided by evidence

We welcome Mungmunpuntipantip and colleagues' thoughts on the management of monkeypox during pregnancy. Their comments reiterate the consensus that monkeypox is a reemerging zoonosis of global health concern, not least for high-risk populations. However, the authors presented several points that require clarification.

First, although skin lesions may be discreet, the most common symptom in the ongoing monkeypox outbreak remains the appearance of rash (systemic, oral, genital, or in other locations) in 16,954 of 20,183 laboratory-confirmed cases (84%) reported to the World Health Organization (WHO). Therefore, a careful clinical examination evaluating epidemiologic circumstances and mucocutaneous sites is crucial should obstetricians encounter a patient with nonspecific symptoms. Although there are reports of asymptomatic viral shedding in gay men, the actual prevalence is presently unknown, and the number who subsequently develop lesions is unclear. Data regarding the frequency of asymptomatic carriage of the monkeypox virus (MPXV) is necessary before the universal screening of pregnant women is recommended.

Second, as of September 15, 2022, gastrointestinal symptoms, including diarrhea and vomiting (as suggested by the authors), have not been recorded in the WHO's global surveillance report. In addition, although the most common neurologic manifestation of monkeypox infection is a prodromal headache—usually generalized or frontal<sup>2</sup>—such headaches are common in pregnancy and many other systemic viral infections. Importantly, however, we advise obstetricians to recognize the onset of altered mental status, muscle weakness, and bladder and bowel incontinence as these are atypical features of MPXV infection, given reports of MPXV-associated encephalomyelitis in previously healthy, immunocompetent individuals.<sup>3</sup> The pathophysiology of such neurologic manifestations is likely to be either an MPXV invasion of the central nervous system or a parainfectious autoimmune process precipitated by MPXV viremia.

Third, the assessment and accreditation of laboratories performing MPXV polymerase chain reaction (PCR) assays are standard linchpins to avoid the authors' concerns of specimen contamination and inaccurate results.

Finally, we disagree with the statement that there is a negligible risk of vertical transmission of MPXV. Monkeypox viral DNA within fetal and placental lesions has been detected concurrently at birth with real-time PCR. More likely, the spurious shortage of clinical data results from the socioeconomic challenges restricting scientific publication within remote countries where monkeypox was previously endemic. Furthermore, it is uncontested that pregnant women with MPXV demonstrate a high rate of adverse outcomes, including pregnancy loss. Several pathogenic mechanisms could contribute to the intrauterine transmission of MPXV, including ascending infection, hematogenous dissemination, and direct infection syncytiotrophoblasts. The risks to the fetus must not be disregarded during this outbreak.

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