

Letters

TO THE EDITOR

Successful Pregnancy After Cardiac Arrest in a Woman With Severe Coronary Vasospasm



We read with great interest the recently published paper “Successful Pregnancy After Cardiac Arrest in a Woman With Severe Coronary Vasospasm.”¹ In this paper, the authors describe an unplanned pregnancy in a patient who experienced a recent cardiac arrest in the setting of severe left anterior descending artery vasospasm. Following her cardiac event, she was discharged home with potentially teratogenic cardiovascular medications, but without discussion of contraception or pregnancy planning. We commend the authors for bringing attention to this gap in care, as well as the discussion of options for termination.

We would like to highlight the discussion regarding pregnancy prevention brought to light in the case report as commented on in Question 3. According to the U.S. Medical Eligibility Criteria (USMEC) for contraception, prolonged systemic use of progestins could be characterized as category III (theoretical or proven risks usually outweigh the advantages of using the method) for *continued* use after an ischemic cardiovascular event.² The patient in this case did not have evidence of atherosclerosis, and ischemia was attributed to vasospasm, so the theoretical risk of systemic progestins is not likely directly applicable in this situation. However, even in the setting of atherosclerotic heart disease, levonorgestrel intrauterine devices (IUDs), which result in predominantly local rather than systemic effects, are considered category II (advantages of the method generally outweigh theoretical or proven risks) for initial use according to the USMEC.² Notably, recent studies have identified that progestin-only contraceptive methods do not carry significantly increased risk of

venous or arterial thrombosis.³ As such, the American College of Obstetricians and Gynecologists currently recommends progestin-only pills, the subdermal implant, or the hormonal IUD for patients with a history of or at risk for venous thromboembolism, myocardial infarction, or stroke.⁴ Although a copper IUD would be also be a safe option for these patients (USMEC category I), it may be associated with increased menorrhagia in the setting of dual antiplatelet therapy or systemic anticoagulation.

Valerie L. Jennings, MD^a

Lindsay G. Panah, MD^b

*Kathryn J. Lindley, MD^c

*Vanderbilt University School of Medicine
Cardiovascular Division

1215 21st Avenue South

Medical Center East, Suite 5209

Nashville, Tennessee 37232

E-mail: Kathryn.lindley@vumc.org

From the ^aDepartment of Obstetrics and Gynecology, Carle Illinois College of Medicine, Champaign, Illinois, USA; ^bAscension St Vincent Heart Center, Indianapolis, Indiana, USA; and the ^cDivision of Cardiology, Department of Medicine, Department of Obstetrics and Gynecology, Vanderbilt University Medical Center, Nashville, Tennessee, USA.

The authors have reported that they have no relationships relevant to the contents of this paper to disclose.

The authors attest they are in compliance with human studies committees and animal welfare regulations of the authors' institutions and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the [Author Center](#).

REFERENCES

1. Ali Thara S, Russell Ashley K, Paulenka Y, et al. Successful pregnancy after cardiac arrest in a woman with severe coronary vasospasm. *J Am Coll Cardiol Case Rep*. 2023;27:102072. <https://doi.org/10.1016/j.jaccas.2023.102072>
2. Curtis KM, Tepper NK, Jatlaoui TC, et al. U.S. medical eligibility criteria for contraceptive use, 2016. *MMWR Recomm Rep*. 2016;65(3):1-103. <https://doi.org/10.15585/mmwr.rr6503a1>
3. Tepper NK, Whiteman MK, Marchbanks PA, James AH, Curtis KM. Progestin-only contraception and thromboembolism: a systematic review. *Contraception*. 2016;94(6):678-700. <https://doi.org/10.1016/j.contraception.2016.04.014>
4. ACOG Practice Bulletin No. 206 Summary: Use of Hormonal Contraception in Women With Coexisting Medical Conditions. *Obstet Gynecol*. 2019;133(2):396-399. <https://doi.org/10.1097/aog.0000000000003073>