

# Acute Coronary Syndrome: Considerations Regarding Pregnancy [Letter]

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## Dear editor

With great interest, we have read the research by Rasheed Ibdah et al about traditional and non-traditional risk factors of acute coronary syndrome in young women.<sup>1</sup> The purpose of this research is to describe traditional and non-traditional risk factors of acute coronary syndrome in young women from the Middle East. This study has shown that multivariable logistic regression analyses identified five independent predictors of acute coronary syndrome: type-2 diabetes, family history of cardiovascular disease, tobacco use, hypertension, and metabolic syndrome. Based on the data, the results of the study concluded: modifiable risk factors play an important role in acute coronary syndrome risk among young women.

It is well known that gestational hypertension/preeclampsia and gestational diabetes mellitus are among the common complications during pregnancy. Approximately 40% preterm preeclampsia women develop essential hypertension within 1 to 2 years after pregnancy.<sup>2</sup> Excessive pregnant weight gain and gestational diabetes mellitus are major intra-pregnancy risk factors for postpartum chronic hypertension in women with preceding gestational hypertension/preeclampsia.<sup>3</sup> Similarly, risk factors for gestational diabetes to progress to type 2 diabetes include pre-pregnancy body mass index, body mass index after delivery, macrosomia, hypertension, persistently elevated levels of HbA1c, fasting blood glucose, 1-hour and 2-hour oral glucose tolerance tests, age, and family history of diabetes, etc.<sup>4</sup> These risk factors are distinct from those associated with non-pregnancy-related chronic hypertension or type 2 diabetes.<sup>5</sup>

These findings suggest that pregnancy complications, such as gestational hypertension, preeclampsia, and gestational diabetes, may serve as risk factors for the development of chronic hypertension and diabetes mellitus in the long term. Chronic hypertension and diabetes mellitus may be intermediates between pregnancy complications and acute coronary syndrome. Further stratification of pregnancy complications and their associated intermediates could improve the assessment of long-term cardiovascular risks, such as acute coronary syndrome, in postpartum women.

In conclusion, this study highlights the necessity for long-term management of postpartum cardiovascular events in women. This requires a collaborative approach involving obstetricians, cardiovascular specialists, and patients to mitigate risks and improve health outcomes.

## Data Sharing Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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## Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

## Disclosure

The authors declare no conflicts of interest in this communication.

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