THE RISK OF PREGNANCY AFTER SPONTANEOUS CORONARY ARTERY DISSECTION

Moderated Poster Contributions
Hall C
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Session Title: Spontaneous Coronary Dissection: Does This Merit More Attention?
Abstract Category: 1. Acute Coronary Syndromes: Clinical
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Authors: Marysia S. Tweet, Sharonne Hayes, Rajiv Gulati, Patricia Best, Mayo Clinic, Rochester, MN, USA

Background: Spontaneous coronary artery dissection (SCAD) is an important cause of myocardial infarction (MI) in young patients. In women, approximately 20% occur in the peripartum period. This and the 20% recurrence rate in long-term follow-up evoke concern for pregnancy after SCAD. Thus, the usual recommendation is to advise against it even though data assessing this risk are lacking.

Methods: We evaluated all women enrolled in a SCAD registry at the Mayo Clinic. The diagnosis of SCAD was confirmed by coronary angiography. Women who had pregnancies after the index SCAD were identified from questionnaires and medical records. Clinical data, outcomes of previous and subsequent pregnancies, knowledge of SCAD diagnosis prior to the pregnancy, and extracoronary vascular conditions, including fibromuscular dysplasia, were evaluated. Subsequent events, pregnancy outcome, and recurrent SCAD were assessed.

Results: A total of 7 of the 266 women in the registry had a pregnancy after an initial SCAD (2.6%). Mean age at the index SCAD was 35.5 years, with 43% occurring in the postpartum period. Mean age at the subsequent pregnancy was 37 years. Only 4 women knew that the initial event was SCAD at the time of pregnancy. The other 3 had been given an incorrect diagnosis of coronary vasospasm. Six pregnancies resulted in live births, with 1 miscarriage at 15 weeks. In follow-up, 6/7 did not have SCAD-related complications, while 1 patient had recurrent SCAD at 9 weeks postpartum resulting in an ST-elevation MI involving the left main coronary artery, treated with emergent coronary artery bypass surgery. This patient’s index SCAD was not related to pregnancy.

Conclusion: The risk of recurrent SCAD in women who become pregnant after an initial SCAD is notable and can be devastating. Importantly, just under half of the women had received an incorrect diagnosis of the cause of her MI rather than SCAD, which may have altered decision-making regarding further pregnancies. Thus, reproductive age women with a history of MI should have careful re-evaluation of etiology with an emphasis on accurately identifying SCAD in order for these women to make an informed decision before subsequent pregnancies.