A potential biomarker for pregnancy-associated heart disease?

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Peripartum cardiomyopathy (PPCM) is a deterioration in cardiac function that occurs in pregnant women during the last month or in the months following their pregnancy. This disorder can occur in women with no prior history of heart disease and the causes are not well understood.

In this issue of the *Journal of Clinical Investigation*, Ingrid Struman and colleagues at the University of Liege in Liege, Belgium, identified a molecule, miR-146a, that can serve as a biomarker for peripartum cardiomyopathy. Struman and colleagues found that expression of miR-146a was induced by the nursing hormone prolactin. MiR-146a expression promoted vascular damage and was increased in a mouse model of PPCM.

Conversely, loss of miR-146a in mice prevented PPCM. Importantly, miR-146a expression was elevated in the serum of pregnant women who developed PPCM, suggesting that serum miR-146a levels could predict which patients are at risk for the disease.

In a companion commentary, Richard Kitsis of Albert Einstein College of Medicine in New York, discusses the potential implications of this work for the identification and treatment of PPCM.

More information: MicroRNA-146a is a therapeutic target and biomarker for peripartum cardiomyopathy, J Clin Invest. 2013;123(5):2143–2154. doi:10.1172/JCI64365
A microRNA links prolactin to peripartum cardiomyopathy, J Clin Invest. 2013;123(5):1925–1927. doi:10.1172/JCI69286

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