

A Report of Non-ST Elevation Myocardial Infarction in a Transgender Woman

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Background: There are approximately 1.4 million transgender individuals in the United States. National cross-sectional data highlights disproportionately elevated risk for myocardial infarction and cardiovascular disease among transgender individuals.

Case Presentation:

A 37-year-old transgender female with history of hypertension, end-stage renal disease, tobacco use disorder, prior gender affirming hormonal therapy and hemorrhagic stroke was admitted for substernal chest pain radiating to the left arm with acute worsening one hour prior to presentation. Her pain was exertion with associated dyspnea. Vitals were significant for hypertension, tachycardia, and tachypnea. Her cardiac exam was unremarkable for diaphoresis, jugular venous distention, abnormal heart sounds or murmurs. Troponins peaked at 1.48ng/mL. Her electrocardiogram showed hyperacute peaked T waves in V1-V2. Echocardiography showed preserved ejection fraction and inferiobasal hypokinesis. She was loaded with aspirin, started on a heparin drip. She was taken for cardiac catheterization, which showed right proximal to mid-right coronary artery thrombus and two overlapping drug-eluting stents were placed.

Methods: All patient information was de-identified and patient consent was obtained. Literature review for cardiovascular disease in the setting of gender dysphoria was conducted and all citations are available for review.

Discussion: While there are few published cross-sectional and prospective clinical studies on cardiovascular disease among LGBTQ adults, there is increasing evidence and recognition, cemented by the recently published scientific statement from the American Heart Association, of the risk factors and manifestations of coronary artery disease in the transgender cohorts. Transgender patients are at higher risk for cardiovascular disease morbidity and mortality, including obesity, hyperlipidemia, diabetes, coronary artery disease, and myocardial infarction. This results from increased inflammation, exogenous sex hormones, platelet aggregation, and immune system up-regulation.

Conclusion: Dedicated research is needed to further elucidate disease pathways and devise strategies for both primary and secondary prevention of coronary artery disease in transgender individuals.