Using cardiac-specific biomarkers to predict cardiovascular disease risk early

November 12 2019

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A new review article provides valuable insights into how traditional and emerging cardiac-specific biomarkers and their associated cardiovascular disease (CVD) risk factors may help point to effective

preventive interventions in high-risk obese populations starting at an early stage of disease development. The growing problem of childhood obesity makes the identification of CVD biomarkers to identify early risk factors even more important, as noted in an article published in *Metabolic Syndrome and Related Disorders.*

Rajesh Parsanathan, Ph.D. and Sushil K. Jain, Ph.D., Louisiana State University Health Sciences Center -Shreveport, coauthored the article entitled, "Novel Invasive and Noninvasive Cardiac-Specific Biomarkers in Obesity and Cardiovascular Diseases." Based on their research, the authors state that while CVD risk markers in childhood obesity are a significant risk factor for CVD in adulthood, they have received too little attention.

The comprehensive review article focuses on traditional cardiac biomarkers as well as novel emerging cardiac-specific biomarkers, such as cardiac troponins, natriuretic peptides, heart-type fatty acid-binding protein, and miRNAs. In addition to biomarkers present in body fluids, the article discusses noninvasive anatomical and electrophysiological markers in cardiovascular disease and obesity.

"Childhood obesity is a growing problem which often enough translates into adult obesity. Both are associated with increased cardiovascular risk, and markers that predict this risk more accurately will allow us to target treatment to the subjects most at risk. This paper is a review of the current state of knowledge regarding such markers," says Dr. Adrian Vella, Editor-in-Chief of Metabolic Syndrome and Related Disorders and Professor, Mayo Clinic College of Medicine, Rochester, MN.

More information: Rajesh Parsanathan et al, Novel Invasive and Noninvasive Cardiac-Specific Biomarkers in Obesity and Cardiovascular Diseases, *Metabolic Syndrome and Related Disorders* (2019). DOI: 10.1089/met.2019.0073