## **Coronary Artery Disease: The Real Trigger?**

## Dr. Bhaskar Purushottam, MD Interventional Cardiologist and Vascular Specialist Rapid City Regional Hospital Rapid City, SD

Abstract: Coronary artery disease is the major cause for morbidity and mortality throughout the world. Coronary artery disease can present in multiple forms. Presentation as an acute coronary syndrome has the worst prognosis. This event is precipitated with plaque rupture or erosion, which leads to vessel thrombosis and occlusion. The results of this pathological cascade can be devastating. The patient can succumb to sudden cardiac death. For several decades, one of the most important goals in medicine has been to prevent the occurrence of acute coronary syndrome and progression of coronary artery disease. There have been innumerable research trials looking into these endpoints. The spectrum of treatment has ranged from simple aspirin therapy to percutaneous coronary intervention to stem cell treatment. One of the most interesting concepts in acute coronary syndrome, which has gained a lot of momentum is the role of the "Vulnerable Plaque". The theory behind the vulnerable plaque is that this plaque breaks down and results in vessel occlusion. However, several research studies at a clinical and histopathological level have shown that not all vulnerable plague ruptures/erosion lead to a clinically significant end point. In fact, most of them do not. Physicians, then went on to propose the theory of a "Perfect Storm". For a clinically significant event to occur, you need the right combination of a vulnerable plaque, prothrombotic milieu, hereditary and environmental factors. Unfortunately, there is not a single test which can test this deadly combination, so that we can identify the patients at risk. With this background, I would like to talk about the possibilities of identifying such a deadly combination with a single test.

Biography: Dr. Bhaskar Purushottam received his medical degree at Bangalore Medical College, India. He then went to do his three year Internal Medicine residency [post graduation] in New Zealand. Finally, he moved to the United States to do a three year residency in Internal Medicine, followed with three years of fellowship in Cardiovascular Medicine at Einstein Medical Center, Philadelphia. Following which he did a one year fellowship in Interventional Cardiology at William Beaumont Hospital, Michigan. He finally completed his post graduate training with a one year fellowship in Endovascular and Structural Interventions at Mount Sinai Medical Center, New York, He then took up a job at Rapid City Regional Hospital, Rapid City in August 2015 and has been there since. He is a board certified Interventional Cardiologist and Vascular Specialist, who was the first doctor in the United States to use the Drug Coated Balloon in lower extremity arterial disease. He is the first doctor to have implanted the Impella RP [world smallest heart pump for the right side of the heart] in the Dakotas [even before Mayo Clinic]. He has published original research papers, review articles, textbook chapters, research abstracts and oral presentations at the American Heart Association. He is a recipient of multiple awards and is the Principal Investigator and Key Investigator in multiple multi-center trials.

When: Tuesday, March 21, 2017 at 11 am Where: CB#204W