4TH WORLD HEART CONGRESS April 29-May 01, 2019 Kyoto, Japan

Role of cardiac computed tomography angiography: Assessment of left ventricular assist device

Reena Anand

Max Super Specialty Hospital, India

The case deals with a patient of 38 years old male known case of dilated cardiomyopathy with pacemaker for few years now came with increasing breathlessness. Patient was with multi-organ failure, deranged kidney and liver function test. Echocardiography showed dilated cardiomyopathy with reduced left ventricular function (Ejection fraction - 20%). Computed Tomography (CT) chest was done which showed bilateral extensive pulmonary edema. Left Ventricular Assist Device (LVAD) surgery was done and patient's clinical condition was improved significantly. Then at the time of discharge Computed Tomography Angiography (CTA) was advised as per LVAD protocol. A comprehensive protocol to evaluate a LVAD was done which included coverage from the aortic arch (to include the outflow cannula) through the abdomen (to include the pump and the exit of the power cord through the skin). The CT scan showed contrast filled an apical inflow cannula. The blood traversed through the device to the outflow graft that typically returns blood via an anastomosis to the mid ascending aorta. There was normal outflow graft whose position is defined as insertion into ascending aorta prior to innominate artery origin. No kinks were seen. There was normal inflow cannula position with left ventricular apical location with cannula tip not directly abutting left ventricle wall i.e. without obstruction to inflow. It is important to have an understanding of the components of the devices and their normal imaging features. Such knowledge can also prepare radiologists to recognize the imaging features of complications such as thrombus in these devices.

Biography

Reena Anand is working as Head of Cardiac Imaging at Max Super Specialty Hospital, New Delhi, India. She has extensive experience on cardiac MRI from New York University. She has given various national and international talks providing training to emerging cardiac radiologist and cardiac technologists worldwide. She has numerous national and international publications to her credit. She is an active Member of Society of Cardiovascular Magnetic Resonance (SCMR).

destinationreena@gmail.com

Notes: