

Abstract

This project explains what Cardiac Catheterization, Shockwave, and Rotablation are. In addition, it talks about how the use of Shockwave and Rotablation can be used in patients with severe calcifications of the coronary arteries. Case studies help to show the comparison between Shockwave and Rotablation, as well as the use of Rotablation and then Shockwave. Rotablation is more useful when treating patients with superficial calcifications, whereas shockwave is more beneficial at treating deeper calcifications. All of these treatment methods are used to keep the coronary arteries open and prevent people from having blocked off arteries causing heart attacks. Two different case studies examine the use of Rotablation following a successful Shockwave so that stents can be implanted into the arteries in attempt to keep them open and clear. Other factors discussed include fluoroscopy times and contrast amounts. The results showed that since Shockwave is a newer therapy more use is needed so that there are more statistics. Overall, the use of Rotablation and Shockwave together can be beneficial in treating patients with severe calcification of the coronary arteries.

Keywords: cardiac catheterization, Rotablation, Shockwave, calcifications, coronary arteries