

中文題目：冠狀動脈旋磨術於冠心病慢性完全阻塞介入治療之罕見病例

英文題目：Rare complication of coronary guidewire transection during rotational atherectomy via transradial access in the percutaneous treatment of chronic coronary total occlusion

廖振宇¹，劉世奇¹，徐國基^{1,3}，駱惠銘^{1,2}，程俊傑¹，邱俊仁^{1,2}

Division of Cardiology, Shin Kong Wu Ho-Su Memorial Hospital, Taipei, Taiwan¹, School of Medicine, College of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan², Graduate Institute of Clinical Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan³

Chronic total coronary occlusion remains one of the limitations of percutaneous transluminal coronary angioplasty, and few therapeutic devices are specifically designed to address this problem. Despite advances in device technology, the management of resistant, calcific lesions remains one of the greatest challenges in successful chronic total coronary occlusion intervention. Established techniques to modify calcific lesions include the use of high-pressure non-compliant balloon dilation, cutting-balloons, anchor balloons, Tornus cathete and high speed rotational atherectomy.

Rotational atherectomy facilitates percutaneous coronary intervention for chronic total coronary occlusion with severe calcification. Transradial intervention of chronic total coronary occlusion is increasing in frequency and is associated with lower major vascular access site complications. However, the small size of the radial artery is a major limitation of this technique, especially for rotational atherectomy.

Transection of the coronary guidewire during rotational atherectomy is a very rare complication. This complication was seen in the treatment of chronic occlusions, which are therefore not risk-free procedures. While uncommon, there are a number of well-described complications including perforation, thrombosis and arrhythmia. Here we report a distal transection of the guiding wire during rotational atherectomy via transradial access in the percutaneous treatment of chronic coronary total occlusion. The procedure was ended after a simplified stenting technique. After confirming the absence of flow disturbance or any other complications associated with rotational atherectomy, the strategies and management were deemed successful. The patient recovered well and discharged the following days. When seen again in August 2014, the patient recovered uneventfully.

Causative factors are described and suggestions are proposed to help avoid this problem.