

Calcified plaque ablated by rotational atherectomy visualised by optical coherence tomography

Terumasa Koyama*, MD; Hiroyuki Okura, MD; Teruyoshi Kume, MD; Kenzo Fukuhara, MD; Yoji Neishi, MD; Akihiro Hayashida, MD; Takahiro Kawamoto, MD; Kiyoshi Yoshida, MD

Department of Cardiology, Kawasaki Medical School, Kurashiki, Japan

This paper also includes accompanying supplementary data published online at: http://www.pconline.com/eurointervention/86th_issue/62

Calcification is visualised by optical coherence tomography (OCT) as a well-delineated, signal-poor region with sharp borders.

A 63-year-old female patient with stable angina underwent percutaneous coronary intervention. OCT (C7 Dragonfly™, ILUMIEN™ OCT system; St. Jude Medical, St. Paul, MN, USA) showed lumen narrowing with heavily calcified plaque (**Figure 1A**). Rotational atherectomy (RA) was performed using a 2 mm burr (Rotablator™ Rotational Atherectomy System; Boston Scientific, Marlborough, MA, USA). After RA, OCT clearly visualised the calcified segment ablated by the 2 mm burr as a circular hole (**Figure 1B** and **Figure 1C**, dotted line indicates the size of the 2 mm Rotablator burr, **Moving image 1**).

OCT delineates calcified plaque without acoustic shadowing like intravascular ultrasound. Therefore, OCT is the best intracoronary imaging modality to select the appropriate burr size for RA and also to confirm the efficacy of RA after ablation.

Conflict of interest statement

The authors have no conflicts of interest to declare.

Online data supplement

Moving image 1. Optical coherence tomography after rotational atherectomy clearly visualising ablated calcified plaque.

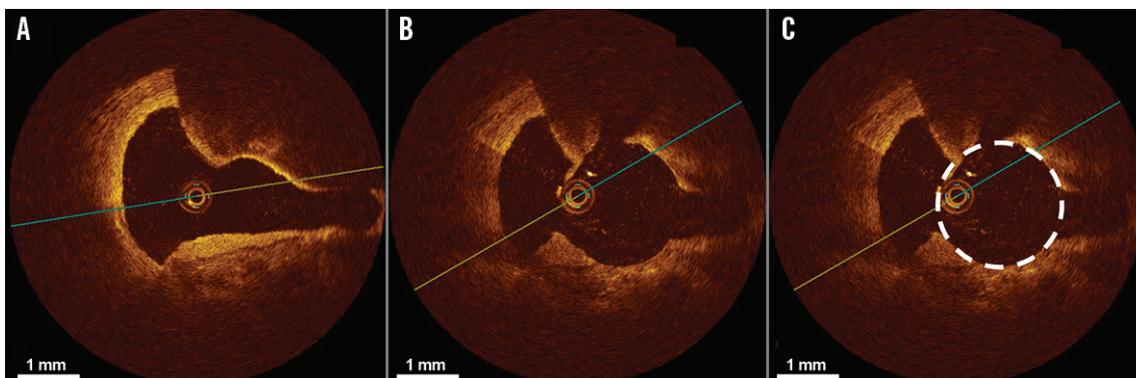


Figure 1. Calcified plaque ablated by rotational atherectomy visualised by optical coherence tomography. A) Optical coherence tomography (OCT) showing lumen narrowing with heavily calcified plaque before rotational atherectomy. After rotational atherectomy, the calcified segment ablated by a 2 mm burr (B) & (C) (dotted line indicates the size of the 2 mm burr).

*Corresponding author: Department of Cardiology, Kawasaki Medical School, 577 Matsushima, Kurashiki, 701-0192, Japan.
E-mail: terumasa.k@med.kawasaki-m.ac.jp