

**A case of chronic total occlusion with severe calcification in the right coronary artery successfully treated using the guide-extension proximal locking method**

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The case is a 78-year-old man. Five years ago, he underwent stent implantation for angina pectoris in his right coronary artery, but was hospitalized due to recurrence of similar symptoms. Coronary angiography revealed a chronic total occlusion distal to the previously implanted stent and in-stent restenosis, both of which showed severe calcification. Although a guidewire successfully crossed the occluded lesion via an antegrade approach, no other device could pass through the lesion, even with the assistance of a guide extension catheter. After applying the guide-extension proximal locking method(GP-lock), we were able to advance a 1.0 mm diameter balloon across the lesion and perform balloon dilatation. Subsequently, we were able to pass a micro catheter through the lesion, allowing us to exchange for a Rotawire and perform rotational atherectomy. The lesion was further dilated using a cutting balloon, followed by deployment of a drug-coated stent, achieving satisfactory expansion.