CASE REPORT

Courtesy of Rajiv Swamy, MD, FSCAI

SUCCESSFUL TREATMENT OF ANTERIOR TIBIAL ARTERY WITH ATHERECTOMY AND ESPRIT™ BTK SYSTEM

This case study outlines the treatment and follow-up of a 60-year-old male with a complex medical history and non-healing wound with purulence at 1st digit on right lower extremity. This procedure involved the use of Diamondback 360TM Peripheral Orbital Atherectomy System, and EspritTM BTK, resulting in successful revascularization.

INTRODUCTION

A 60-year-old male with a complex medical history, including PAD, DM, CAD, and CHF, presented with a non-healing wound with purulence at 1st digit right lower extremity, with osteomyelitis of right distal phalanx (**Figure 3**). A total occlusion was present in the Anterior Tibial (AT) Artery, with minimal reconstitution in the distal leg (**Figure 1A+B**).





PROCEDURAL OVERVIEW

A Diamondback 360[™] Peripheral Orbital Atherectomy System 1.25 Micro Crown device was utilized at low

and medium speeds to address calcification in the AT, followed by a non-compliant (NC) balloon. IVUS confirmed adequate plaque modification, but significant vessel recoil was noted following balloon angioplasty.

The target lesion in the right AT was measured via IVUS and a ViperWire Advance[™] Guide Wire was used to deliver a 3.75x38 mm Esprit[™] BTK scaffold to the proximal AT.

Post-dilatation of the Esprit[™] BTK scaffold was performed with 4.0 x 40 mm non-compliant (NC) balloon dilatation catheter. Post-procedural angiogram demonstrated brisk flow in the AT (**Figure 2A**) & filling of the dorsalis pedis (**Figure 2B**).





CONCLUSION

The key takeaway for this case is the significance of recoil following plain balloon angioplasty. Esprit[™] BTK offers radial strength similar to a metallic stent within the first 6 months to address this recoil,¹ while preserving flexibility for the future with complete resorption in 3 years.²

1. Data on file at Abbott. Testing done with XIENCE Sierra[™] 3.5 x 38 mm at nominal.

2. Data on file at Abbott. Excluding platinum markers.

CAUTION: This product is intended for use by or under the direction of a physician. Prior to use, reference the Instructions for Use, inside the product carton (when available) or at <u>manuals.eifu.abbott</u> for more detailed information on Indications, Contraindications, Warnings, Precautions and Adverse Events. This material is intended for use with healthcare professionals only.

Illustrations are artist's representations only and should not be considered as engineering drawings or photographs. Photos on file at Abbott.

Information contained herein for DISTRIBUTION outside of the U.S. ONLY. Check the regulatory status of the device(s) in your country or region prior to use.

Abbott International BV Park Lane, Culliganlaan 2B, 1831 Diegem, Belgium, Tel: 32.2.714.14.11 [™] Indicates a trademark of the Abbott Group of Companies. <u>www.cardiovascular.abbott</u> ©2025 Abbott. All rights reserved. MAT-2503151 v1.0

