ROBOTIC-ASSISTED COMPLEX MULTIVESSEL PCI WITH ULNAR ACCESS

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Case History

A 71-year-old male with a history of CAD and previous PCI was experiencing significant anginal symptoms despite two anti-anginal medications. Diagnostic angiography showed a patent stent in the right coronary artery (RCA) with a distal 99% occlusion. There were 2 type B stenoses (80% and 70%) separated by a fair amount in the left anterior descending (LAD) artery. The patient had a normal Allen's test, with a stronger ulnar pulse.

Robotic Procedure

A guidewire and HS 1 guide catheter were introduced into the ulnar artery and advanced to the RCA. The guidewire was loaded into the CorPath® cassette. A Trek dilatation catheter was then loaded into the CorPath System and was quickly advanced to the RCA using the turbo feature at the interventional cockpit. The balloon was inflated for 10 seconds at 6 atmospheres (atm) twice and then removed. A 3.0x18mm Alpine stent was loaded into the CorPath cassette. The stent was advanced robotically through the previous stent with no difficulty and properly positioned. After stent deployment, all devices were removed.

RCA Before Intervention

RCA After Intervention

The same 0.014" guidewire was re-introduced into the ulnar artery, along with an EBU guide catheter, and advanced to the LAD. The previously deployed Trek dilatation catheter was then loaded into the CorPath System and advanced to an 80% lesion

Facility Details

St.Joseph's Hospital Health Center
Syracuse, NY

Devices Used

- CorPath® Vascular Robotic System
- 0.014" Hi-Torque Balance Middleweight guidewire (Abbott Vascular)
- 6 Fr HS 1 Launcher Guide Catheter (Medtronic)
- 6 Fr EBU 3.5 Launcher Guide Catheter (Medtronic)
- 2.50x20mm Trek Dilatation Catheter (Abbott Vascular)
- 2.00x15mm Mini Trek Dilatation Catheter (Abbott Vascular)
- 3.0x18 mm Xience Alpine® (Abbott Vascular)
- 2.5x23mm Xience Alpine® (Abbott Vascular)
- 2.5x18mm Xience Alpine® (Abbott Vascular)
- 2.5x12mm Xience Alpine® (Abbott Vascular)
- 2.0x12mm Xience Alpine® (Abbott Vascular)

CorPath
Precision Vascular Robotics

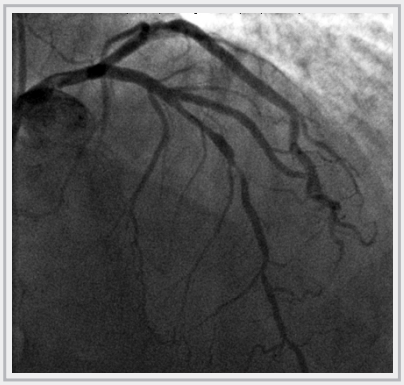
Robotic-Assisted Complex Multivessel PCI with Ulnar Access

in the mid-LAD. Predilatation (13 seconds at 10 atm) was performed, and the balloon was removed.

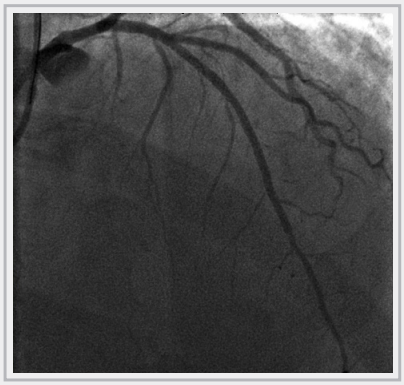
Several Alpine stents were needed to treat the 2 lesions in the LAD, which was extremely tortuous. All stents were advanced and positioned robotically: a 2.5x23mm stent in the mid-LAD; a 2.5x18mm Alpine proximal to the first stent; a 2.5x12mm stent distal to the first stent; and a 2.5x12mm Alpine in the distal LAD. After deployment of stents, a Mini Trek balloon was loaded into the CorPath cassette and advanced robotically, crossing multiple stented segments. Post-dilatation was performed at several stented segments.

Results / Conclusion

Successful robotic-assisted PCI of multiple complex lesions via ulnar access. A single guidewire was used to treat lesions in the RCA and LAD. The robotic system easily advanced stents through prior stented segments and newly placed stents. TIMI 3 flow was achieved, with no residual stenosis.



LAD Before Intervention



LAD After Intervention

"St. Joseph's Hospital, which performed one of the first angioplasty procedures in the US, has a rich history of using revolutionary tools and techniques to provide the best treatment possible for patients. CorPath is one such tool. CorPath enables precise movement of wires and catheters even through previously stented segments. CorPath also significantly decreases exposure to scatter radiation, which is becoming a top priority for the hospital and its employees."

– Alan Simons, MD

To learn more, call **1-800-605-9635** or email: **sales@corindus.com**

CorPath 200 System is intended for use in the remote delivery and manipulation of coronary guidewires and balloon/stent catheters during PCI procedures.

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