

SUCCESSFUL PCI OF RCA TOTAL OCCLUSION WITH ROBOTIC ASSISTANCE AND RIGHT RADIAL ACCESS

Background

A 62 year old female presented to the hospital with chest pain. She had a history of hypertension, diabetes, obesity and triple vessel CAD, and had been turned down for CABG surgery. Percutaneous interventions were scheduled, and the LAD and diagonal lesions were successfully treated with stents one month prior to the procedure reviewed below.

Procedure

The total occlusion in her proximal to mid RCA was treated using a partial-robotic approach to reduce operator radiation exposure and enable precise stent placement. Right Radial access was used for patient comfort and to decrease risk of access site complications. A 6F Sheathless AL1 guide catheter was used to cannulate the RCA for additional support during the procedure. The vessel was wired and sub-total lesion crossed manually using a Pilot 50 guidewire and a micro cross catheter. Intraluminal position was verified, after which the Pilot 50 guidewire was exchanged for an Ironman guidewire through the micro cross, and the catheter was then removed. From this point forward, the physician was able to complete the intervention from the protection of the CorPath® Interventional Cockpit. The guide catheter, guidewire and 2.0x20mm Trek balloon were loaded into the CorPath cassette. The balloon was advanced robotically and sequential pre-dilatations of the lesion were performed. The balloon was then exchanged for a 3.25x38mm Xience DES, which was robotically placed across the lesion and successfully deployed using the precision of the CorPath System. The



Physician: Cindy Grines
MD

Institution

Detroit Medical Center
Heart Hospital
Detroit, MI

Equipment

- 6F Sheathless AL1 (Asahi)
- Micro cross catheter (Roxwood Medical)
- Pilot 50 0.014" guidewire (Abbott)
- Ironman 0.014" guidewire (Abbott)
- 2.0x20mm Trek balloon (Abbott)
- 2.25x38mm Xience DES (Abbott)
- 3.25x20mm NC Trek balloon (Abbott)
- CorPath Vascular Robotic System

Case Time:
45 min.

CorPath Time:
20 min.

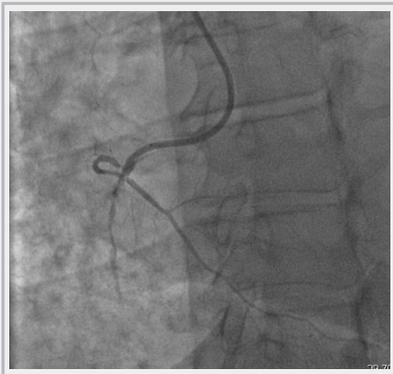
Fluoro Time:
11 min.

Successful PCI of RCA Total Occlusion with Robotic Assistance and Right Radial Access

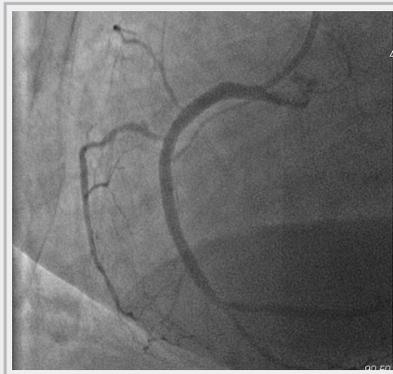
stent catheter was exchanged for a 3.25x20mm NC Trek and post dilatations were robotically performed. Final angiography demonstrated successful RCA revascularization.

Results / Conclusion

This case demonstrates the value of CorPath, even during complex interventions where a partial manual approach is necessary. The physician was able to complete a significant portion of the procedure in a seated position shielded from radiation. Pre-dilatation, stenting and post stent dilatations were all performed in a timely manner showing that the system can be used without significantly affecting procedural time.



Before



After

“This case demonstrates the complexity of cases that can be treated with the CorPath System. Radial access is beneficial for patients, CorPath makes it safer for operators along with augmenting our ability to deliver treatment with robotic precision. In this long, complex case I was able to reduce my radiation exposure and orthopedic strain by sitting in the comfort of the radiation shielded cockpit. This is a great solution to the occupational challenges we face every day in the lab.”

– Cindy Grines
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.

Corindus
Vascular Robotics