

## CASE INSIGHTS



### AT A GLANCE

A young patient diagnosed with intermittent complete heart block and who has a genetic predisposition to continued disease progression was an ideal candidate for the Aveir VR LP.

### KEY TAKEAWAYS

- Unique characteristics of the Aveir delivery catheter allow for the hub to be locked once appropriate deflection curve and location is achieved, improving overall stability.
- A full 1.5 rotations when delivering the device is encouraged to ensure proper fixation and good engagement of myocardium.

### NEXT STEPS

**SCAN THE QR CODE BELOW** to learn more about the Aveir VR LP and read recently published real-world evidence.

**STAY INFORMED!** Follow the QR code to receive first access to the latest information and updates.



### PATIENT DEMOGRAPHICS

A male patient in his 30s diagnosed with sarcoidosis and a history of intermittent complete heart block. In sinus rhythm at time of implant. Candidate for potential upgrade to dual chamber once such a device may be available.\*

The LP device electronics are designed to be enabled by future software, upon regulatory approval, to support dual chamber pacing in the future. Dual chamber pacing system is currently in clinical trial (ClinicalTrials.gov NCT #05252702) and limited to investigational use only.

### CHALLENGE

#### MECHANISMS TO DETERMINE CATHETER LOCATION    CARDIAC MOTION AFTER FIXATION

- Ballooning of protective sleeve was observed as the catheter was being deflected due to pliability of the protective sleeve and contact against the RA roof
- Implant team was not concerned since this is one of the methods used to determine where the soft, flexible, protective sleeve is in the heart
- There are multiple ways to determine where the Aveir delivery catheter is in the heart including the protective sleeve, contrast, and mapping
- Unusual motion of the LP noted after fixation. Rather than the typical up down motion of the LP moving with the cardiac cycle, it appeared to be cyclical motion.
- Sustained confidence in the fixation of the LP because:
  1. the physician completed a true 1.5 turns for fixation
  2. was able to manipulate the proximal end of the device with no movement of the helix
  3. numbers improved over time as expected

	MAPPING	FIXATION	5 MIN.	10 MIN.	PRE DISCHARGE
<b>THRESHOLD</b>	1.0V @ 0.4ms	2.25V @ 0.4ms	1.25V @ 0.4ms	0.5V @ 0.4ms	0.25V @ 0.4ms
<b>IMPEDANCE</b>	690 ohms	740 ohms	810 ohms	840 ohms	1210 ohms
<b>SENSING</b>	7.5mV	7.5mV	3.5mV	4mV	5.5mV

### SOLUTION

LP was advanced to RA/IVC junction. Protective sleeve was pulled back and telemetry was established in under 1 minute. Device was programmed to VVI 40. Device was advanced into RV and quickly positioned in a septal orientation. Position was confirmed with RV gram in RAO and checked position in LAO. Mapping was performed and the physician elected to proceed with implant at this location.

Fixation was achieved using the following steps:

- Cine image taken to mark the location of the chevron
- LP control knob turned 3-4 clicks at a slow cadence; LP was rotated approximately 1/4 rotation

- Pause for torque buildup
- Continued turning LP control knob until 1 full rotation complete
- Came off fluoro for about 30 seconds
- Several more clicks until the device approached 1.25 rotations
- Team elected to rotate 1 more click to approach exactly 1.5 rotations

The device was put into tether mode and a deflection test was performed. Numbers were checked at this time, and again at 3 minutes and 5 minutes before releasing device.

### COI AT IMPLANT:

