

# Create a Path Through Soft Tissues with Controlled RF Puncture Technology

**PowerWire® Pulse**  
RF Guidewire



## Create controlled cuts through targeted soft tissue

The **PowerWire® Pulse** Radiofrequency (RF) Guidewire has been used to cut soft tissue including structures of the cardiovascular system, portal venous system, biliary system, urinary system, and gastrointestinal (GI) tracts<sup>1-19</sup>

### Portal Venous System

- Transjugular intrahepatic portosystemic shunt (TIPS) and direct intrahepatic portocaval shunt (DIPS) creation<sup>9-12</sup>

### GI and Biliary

#### Biliary

- Obstructive biliary strictures<sup>8,10,16</sup>

#### GI

- Biliary-Enteric Anastomoses<sup>6,16</sup>



### Cardiovascular

- Reverse Potts Shunt<sup>2</sup>
- Endovascular management of aortic coarctation<sup>1,13</sup>

### Urinary

- Obstructive ureteral strictures
- Urethral strictures
- Ureteroenteric anastamotic strictures<sup>6,14</sup>

## References

1. Almashham, Y., Dahdah, N. & Miro, J. Use of Radiofrequency Then Stent Implantation for Recanalization of Complete Aorta Coarctation. *Pediatr Cardiol*, 29, 207–209 (2008). <https://doi.org/10.1007/s00246-007-9090-2>.
2. Anderson, J. H., Cabalka, A. K., Frantz, R. P., Cajigas, H. R., & Taggart, N. W. Transcatheter nonductal reverse Potts shunt creation in pulmonary arterial hypertension. *Circulation: Cardiovascular Interventions*, 15(1). <https://doi.org/10.1161/circinterventions.121.011315>.
3. Betensky, B. P., & Santangeli, P. Radiofrequency wire-facilitated transseptal access using a superior approach for atrial fibrillation ablation in a patient with inferior vena cava obstruction. *HeartRhythm Case Reports*, 2(3), 265–267. <https://doi.org/10.1016/j.hrcr.2015.09.008>
4. Chopra, P., Cleveland, C. H., Johnson, M., Michell, H., Holoch, P., Irwin, B., Scriver, G. M., & Morris, C. S. Creation of a neoinfundulum and serial balloon dilations for the treatment of the excluded calyx: Two cases describing a novel technique. *Radiology Case Reports*, 15(8), 1121–1127. <https://doi.org/10.1016/j.radcr.2020.04.038>.
5. Clark, T. W. I. & Park, B. J. Neoureter Creation to Bypass Distal Ureter Obstruction into Neobladder Using Radiofrequency Guide-Wire Technique. *Journal of Vascular and Interventional Radiology*, 31(9), 1503–1505. <https://doi.org/10.1016/j.jvir.2020.04.012>.
6. Close, O. N., Akinwande, O., Varma, R. K., Santos, E., & Kim, H. S. Percutaneous hepaticojejunostomy using a radiofrequency wire for management of a postoperative bile leak. *CardioVascular and Interventional Radiology*, 40(1), 139–143. <https://doi.org/10.1007/s00270-016-1468-1>.
7. Cool, D. W., Xu, S. S., Li, K. J., Power, N. E., & Kribs, S. W. (2021). Percutaneous neoanastomosis creation for an ileal conduit ureteroenteric occlusion using radiofrequency guidewire and snare target technique. *Journal of Vascular and Interventional Radiology*, 32(5), 778–781. <https://doi.org/10.1016/j.jvir.2020.12.028>.
8. Dai, R., Kim, C. Y., Sudan, D. L., Perkins, S. S., Tamas, J. W., & Suhocki, P. V. Percutaneous creation of a choledocho-choledochostomy for intractable iatrogenic bile duct injury. *Clinical Endoscopy*, 56(3), 384–387. <https://doi.org/10.5946/ce.2022.098>.
9. Farsad, K., Narasimhan, E., Russell, L., & Kaufman, J. A. Transjugular intrahepatic portosystemic shunt creation using a radiofrequency wire: Prospective clinical safety and feasibility trial in cirrhosis. *Journal of Vascular and Interventional Radiology*, 31(9), 1401–1407. <https://doi.org/10.1016/j.jvir.2020.05.025>.
10. Guimaraes, M., Uflacker, A., Schönholz, C., & Uflacker, R. Successful Recanalization of Bile Duct Occlusion with a Radiofrequency Puncture Wire Technique. *Journal of Vascular and Interventional Radiology*, 21(2), 289–294. <https://doi.org/10.1016/j.jvir.2009.10.012>.
11. Liang, J. J., Lin, A., Mohanty, S., Muser, D., Briceno, D. F., Burkhardt, J. D., Supple, G. E., Callans, D. J., Dixit, S., Horton, R. P., Di Biase, L., Marchlinski, F. E., Natale, A., & Santangeli, P. Radiofrequency-Assisted transseptal access for atrial fibrillation ablation via a superior approach. *JACC. Clinical Electrophysiology*, 6(3), 272–281. <https://doi.org/10.1016/j.jacep.2019.10.019>.
12. Majdalan, B. S., Elliott, E. D., Michaels, A. J., Hanje, A. J., & Saad, W. E. A. Radiofrequency wire recanalization of Chronically thrombosed TIPS. *CardioVascular and Interventional Radiology*, 39(7), 1040–1044. <https://doi.org/10.1007/s00270-016-1305-6>.
13. Menon, P. J., & Walsh, K. A case series describing percutaneous management of aortic isthmus atresia. *Vascular and Endovascular Surgery*, 54(5), 463–466. <https://doi.org/10.1177/1538574420921280>.
14. Nirmalarajan, S., Borowski, A., Gearhart, J. P., Mitchell, S. E., & Weiss, C. R. Urethral recanalization using a radiofrequency guide wire and a rendezvous approach for traversal of a pelvic fracture urethral distraction defect. *Journal of Vascular and Interventional Radiology*, 27(11), 1768–1770. <https://doi.org/10.1016/j.jvir.2016.03.026>.
15. Plotkin, A., Hanks, S. E., Han, S. M., Fleischman, F., Weaver, F. A., & Magee, G. A. Endovascular septal fenestration using a radiofrequency wire to salvage inadvertent false lumen deployment of a frozen elephant trunk stent graft. *Journal of Vascular Surgery Cases and Innovative Techniques*, 5(4), 553–556. <https://doi.org/10.1016/j.jvscit.2019.07.011>.
16. Robins, C., Xiao, N., Salem, R., Malik, A., Keswani, R. N., & Riaz, A. (2022). Percutaneous biliary neo-anastomosis or neo-duct creation using radiofrequency wires. *CardioVascular and Interventional Radiology*, 45(3), 337–343. <https://doi.org/10.1007/s00270-022-03059-5>.
17. Sandoval, J. & Chaturvedi, R. A simple and fast technique for radiofrequency-assisted perforation of the atrial septum in congenital heart disease. *Annals of Pediatric Cardiology*, 9(1), 39. <https://doi.org/10.4103/0974-2069.171405>.
18. Santangeli, P. (2022). Right atrium to left ventricle puncture for VT ablation in patients with mechanical aortic and mitral valves: A step-by-step approach. *Journal of Cardiovascular Electrophysiology*, 33(9), 2094–2099. <https://doi.org/10.1111/jce.15467>.
19. Stella, S. F., Lindsay, T. F., & Tan, K. T. (2019). Toronto PowerWire fenestration technique to access false lumen branches in fenestrated endovascular aneurysm repair for chronic type B dissection. *Journal of Vascular Surgery*, 69(1), 249–252. <https://doi.org/10.1016/j.jvs.2018.06.200>.

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**PowerWire® Pulse**  
RF Guidewire



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