

output is not completely supported by a ventricular assist device.

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REFERENCES

1. Weil BR, Konecny F, Suzuki G, Iyer V, Canty JM Jr. Comparative hemodynamic effects of contemporary percutaneous mechanical circulatory support devices in a porcine model of acute myocardial infarction. *J Am Coll Cardiol Intv* 2016;9:2292-303.
2. Burkhoff D, Sayer G, Doshi D, Uriel N. Hemodynamics of mechanical circulatory support. *J Am Coll Cardiol* 2015;66:2663-74.
3. Rummelink M, Sjaauw KD, Henriques JP, et al. Effects of mechanical left ventricular unloading by Impella on left ventricular dynamics in high-risk and primary percutaneous coronary intervention patients. *Catheter Cardiovasc Interv* 2010;75:187-94.

Impella Retrieval: Redux



We were pleased to read “First Experience With Successful Percutaneous Retrieval of Retained-Fractured Impella Device” in *JACC: Cardiovascular Interventions* (1). Because temporary mechanical circulatory support devices are used with increasing frequency, we are likely to continue experiencing device-related issues.

We reported on a remarkably similar case 2 months prior: “Impella 5.0 Fracture and Transcatheter Retrieval” (2). The location of device fracture is different, highlighting the potential areas of weakness that should be considered by those implanting these devices. The technique we described for retrieval of the retained device is also used in the current report (1), validating our process as appropriate for this clinical scenario.

With rapidly increasing use of new technology, we are bound to discover new challenges such as reported here. Creative thinking will lead to innovative solutions as highlighted in these papers.

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REFERENCES

1. Saleh QA, Foster M, Abi Rafeh N. First experience with successful percutaneous retrieval of retained-fractured Impella device. *J Am Coll Cardiol Intv* 2017;10:e15-6.
2. Bhamidipati CM, Mathur M, Hira RS, McCabe JM, Pal JD. Impella 5.0 fracture and transcatheter retrieval. *J Am Coll Cardiol Intv* 2016;9:2568-70.

Angiographic Follow-Up in Patients With Coronary Artery Disease



Is There a Window to Be Definitively Closed?

We read with great interest the paper of Shiomi et al. (1) about the impact of angiographic follow-up (AFU) in patients undergoing percutaneous coronary intervention (PCI). The authors have to be congratulated for their effort to clarify a quite controversial theme. The main conclusion is that after a median follow-up of 4.6 years, no benefit in terms of the composite primary outcome (death, stroke, rehospitalization for myocardial infarction [MI] or heart failure) emerged for the AFU group, whereas repeated revascularization rates were higher compared with the clinical/ischemia-driven group.

As already stated in the editorial by Puri et al. (2), many points must be argued to better interpret these results. First of all, the study was not sufficiently powered to show significant differences between the 2 groups. The incidence of target lesion revascularization (TLR) was very low, probably favored by newer-generation drug-eluting stents and a strong compliance to optimal medical therapy as usual in randomized controlled trials (RCTs). In this setting, follow-up (FU) duration and population size were