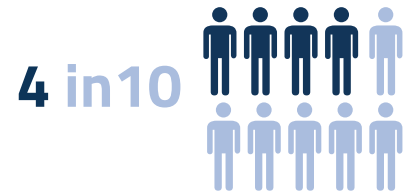


HEART RECOVERY FOR PATIENTS WITH CARDIOMYOPATHY IN THE SETTING OF CARDIOGENIC SHOCK: What You Need to Know

What is Cardiomyopathy?

Cardiomyopathy is a spectrum of diseases in which the heart muscle becomes enlarged, thick or rigid, causing it to weaken. Eventually the heart may not be able to pump enough blood to the body, known as cardiogenic shock. It can be difficult to diagnose because it may present with no or little prior symptoms.

- ▲ Cardiomyopathies can be genetic (present at birth) or acquired. A recent study found that about **four in ten** cardiomyopathies are genetic.¹
- ▲ Cardiomyopathies often occur in young, otherwise healthy people, and expecting or new moms. They can cause advanced heart failure, heart attacks leading to cardiogenic shock, or even cardiac death.



Peripartum Cardiomyopathy (PPCM)

A rare form of the disease that occurs in women during the final months of pregnancy through five months after delivery. It remains a major cause of maternal morbidity and mortality.^{2,3}

Symptoms can be mild to severe, and sometimes mimic pregnancy symptoms, such as swelling of the feet and legs, and shortness of breath.

- ▲ Women who had PPCM have a **21%** chance of experiencing it in subsequent pregnancies.⁴
- ▲ Currently about **half of women with PPCM** do not fully recover their heart function.⁵
- ▲ Among those who do not fully recover, the risk of death is **85 percent** during the five years after their pregnancy.⁶

Myocarditis

A rare inflammation of the heart muscle, is another form of cardiomyopathy. It can be caused by a viral or bacterial infection, autoimmune disease, reaction to medication, or other causes and it is often difficult to diagnose.

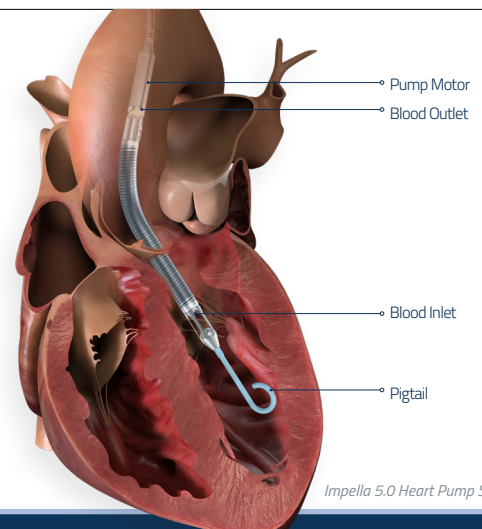
It is more common in young adults than in other groups, and often they are otherwise healthy.

- ▲ About **350,000** people died of myocarditis in 2015.⁷
- ▲ Myocarditis and an associated disorder called dilated cardiomyopathy are the cause of **45%** of heart transplants in the United States.⁸
- ▲ Between **5-20%** of sudden cardiac death cases in young adults are due to myocarditis.⁹

Treatment with the Impella® Heart Pump

Impella, the world's smallest heart pump, assists the heart's pumping function, allowing it to rest and potentially recover.

Impella heart pumps are approved by the U.S. Food and Drug Administration (FDA) for use in patients who have cardiomyopathy, including peripartum cardiomyopathy or myocarditis in the setting of cardiogenic shock, a form of acute heart failure in which the heart suddenly cannot pump enough blood to meet the body's needs. For these patients, the Impella heart pump may allow for heart recovery by increasing blood flow and reducing stress on the heart muscle. Heart recovery is the ideal option for a patient's quality of life and has the ability to save costs for the healthcare system.^{10, 11, 12}



Impella 5.0 Heart Pump Shown

References

1. <https://www.escardio.org/The-ESC/Press-Office/Press-releases/Four-in-ten-cardiomyopathies-a-major-cause-of-sudden-death-in-young-people-a>
2. [http://www.ajconline.org/article/S0002-9149\(16\)30562-8/fulltext](http://www.ajconline.org/article/S0002-9149(16)30562-8/fulltext)
3. <http://www.onlinejacc.org/content/66/8/905>
4. <http://www.nejm.org/doi/full/10.1056/NEJM200105243442101>
5. <https://jamanetwork.com/journals/jama/fullarticle/192436>
6. <http://circ.ahajournals.org/content/111/16/2050.full>
7. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)31012-1/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31012-1/abstract)
8. <https://www.myocarditisfoundation.org/about-myocarditis/>
9. <https://www.myocarditisfoundation.org/about-myocarditis/>
10. <https://www.ncbi.nlm.nih.gov/pubmed/24130115>
11. Cheung A, Danter M, Gregory D. TCT-385 Comparative Economic Outcomes in Cardiogenic Shock Patients Managed with the Minimally Invasive Impella or Extracorporeal Life Support. *J Am Coll Cardiol*. 2012;60(17_S): doi:10.1016/j.jacc.2012.08.413.
12. <http://www.ahdonline.com/issues/2013/march-april-2013-val-6-no-2/1360-feature-1360>



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